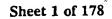
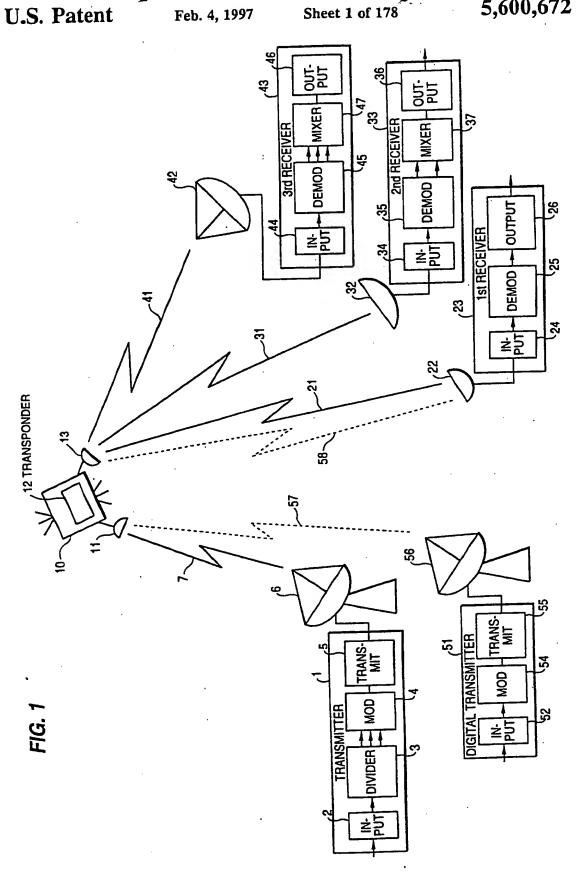
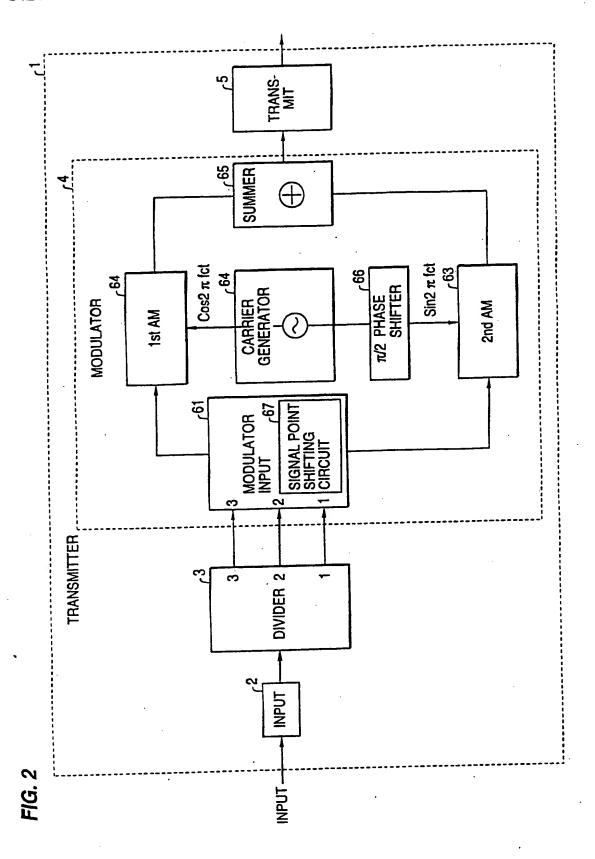


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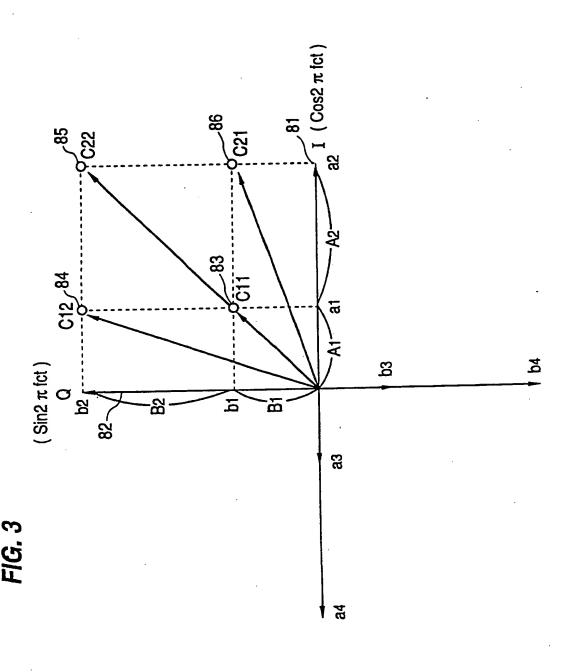


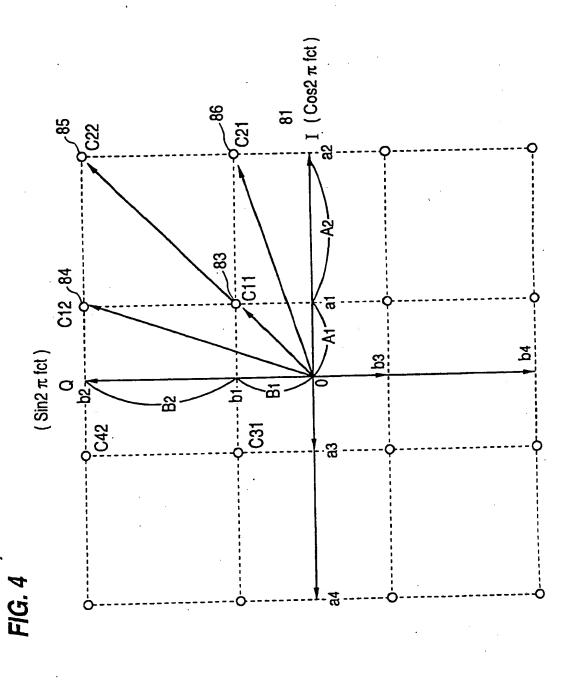
5,600,672











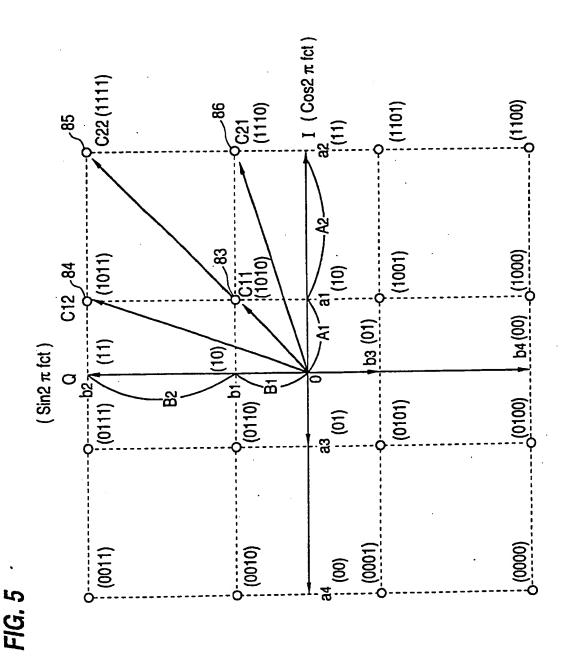


FIG. 6 Q 92 0 0 11 01 0 0 0 93、 Ö 0 O 10 00 0

FIG. 7

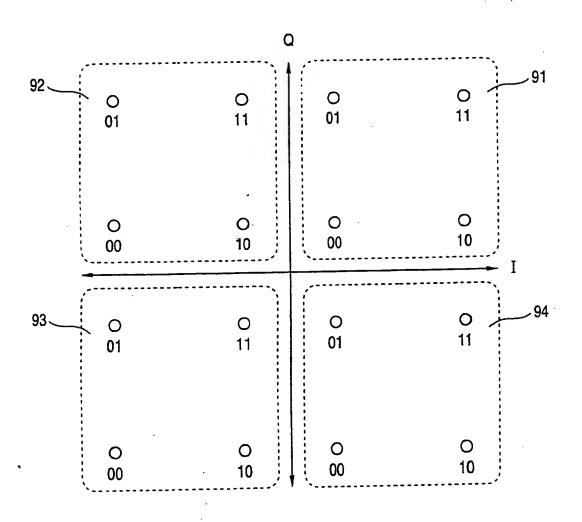
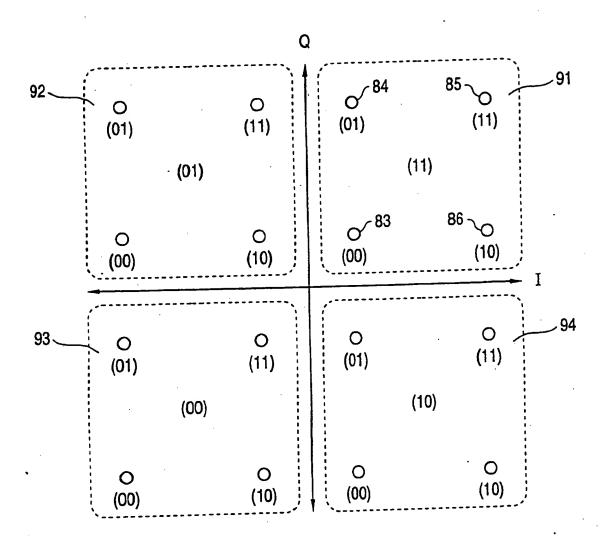


FIG. 8



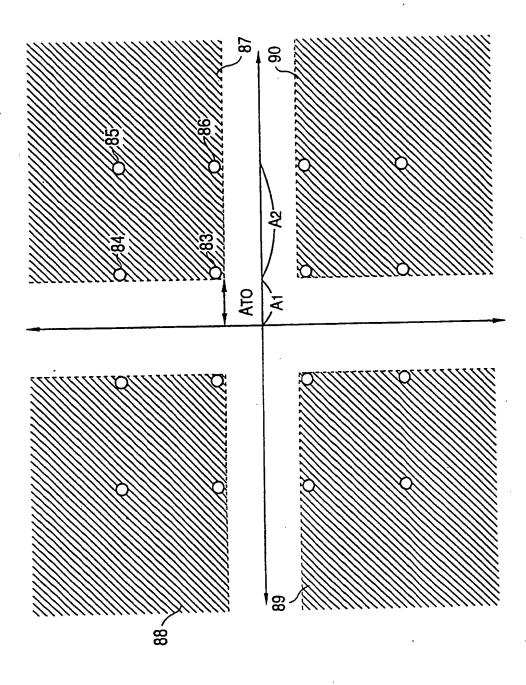


FIG. 10 84 92 A(16) 96 B₂ 95 Вı A(4) 93



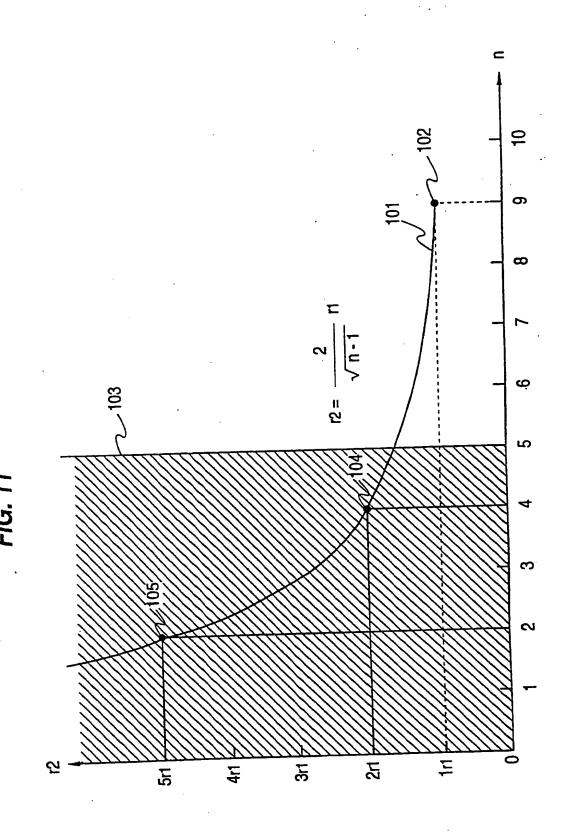
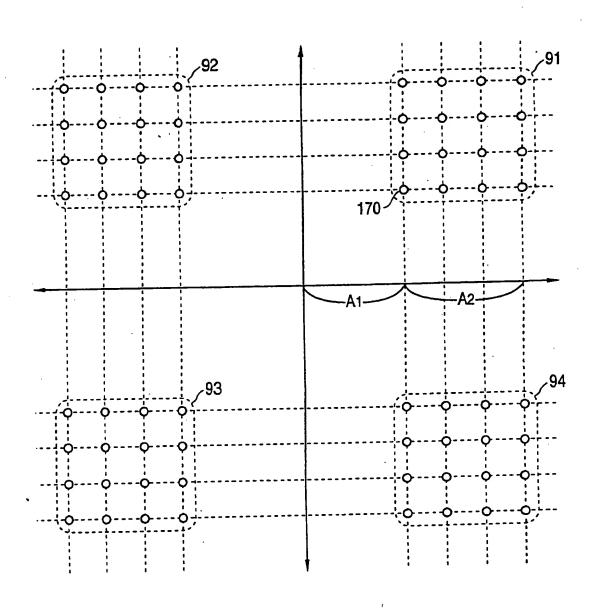


FIG. 12

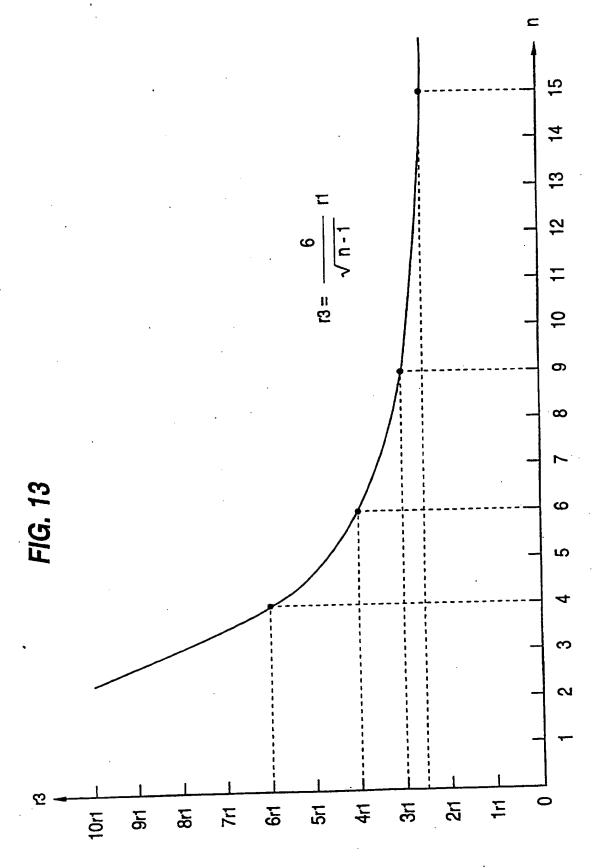
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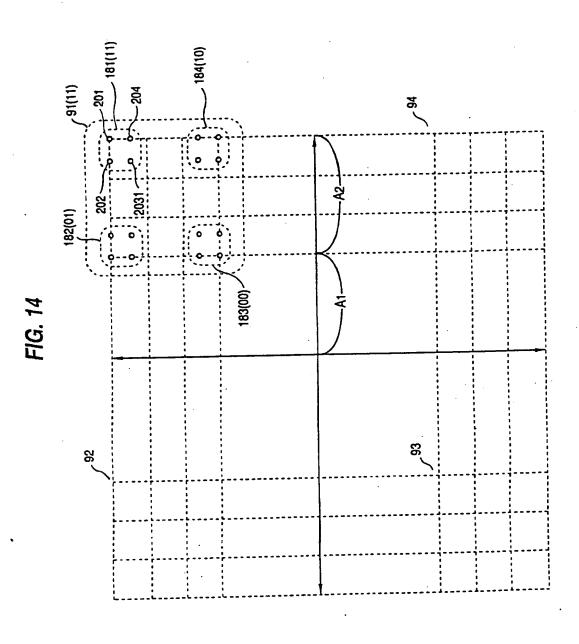
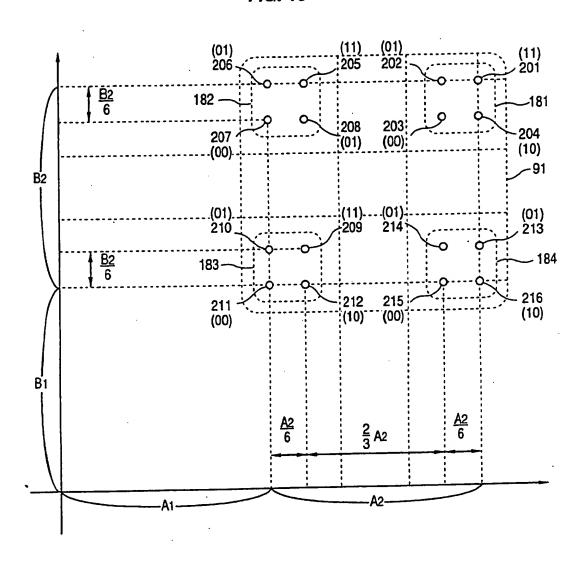
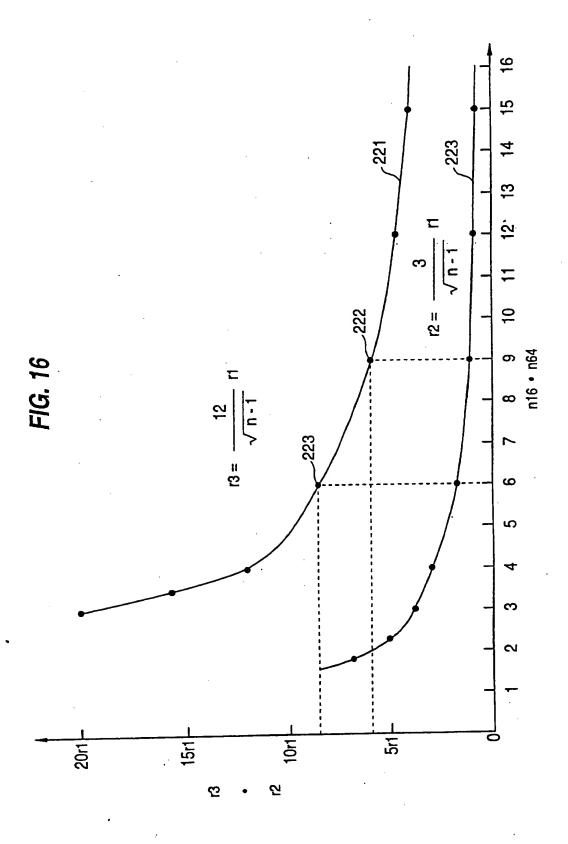


FIG. 15







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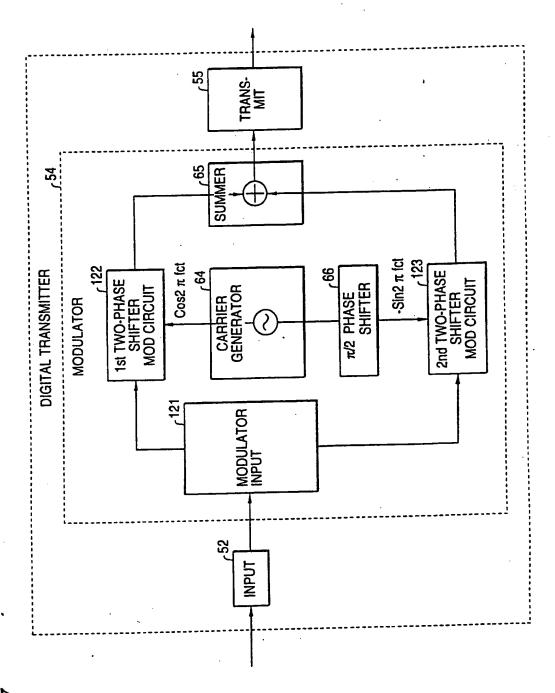
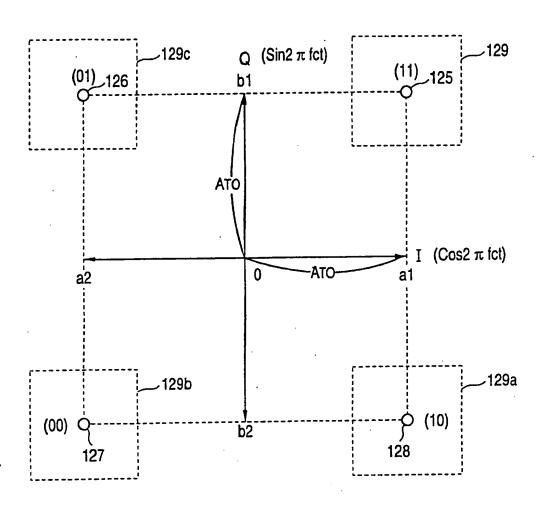
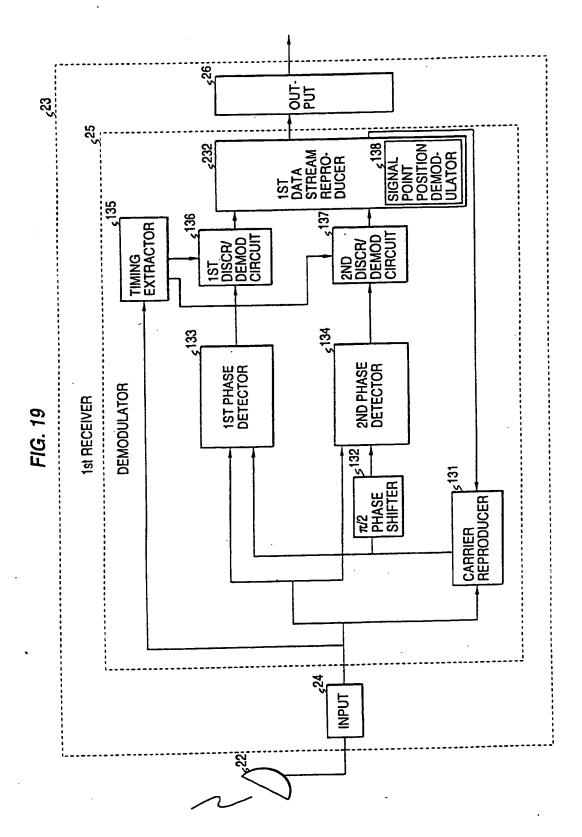
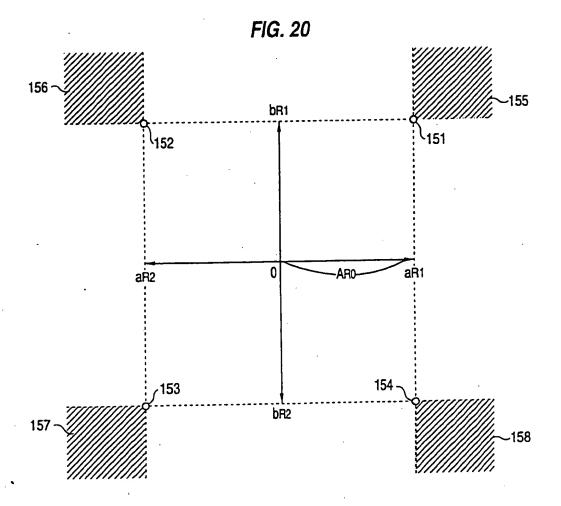


FIG. 17

FIG. 18







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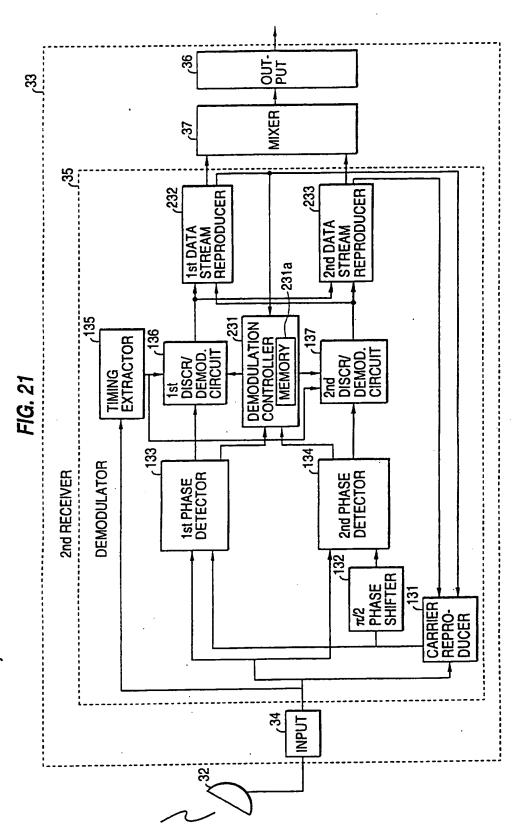
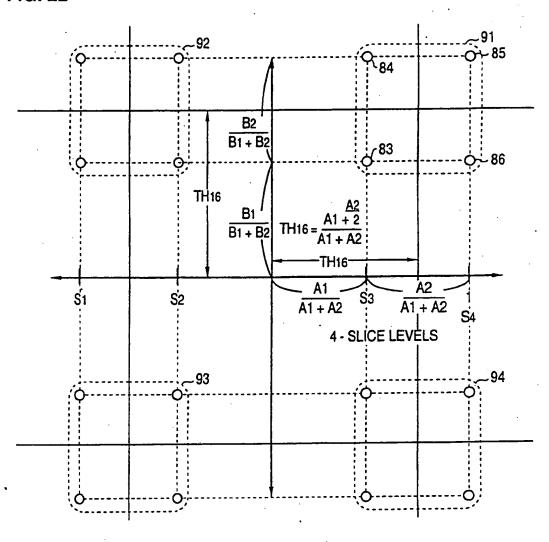
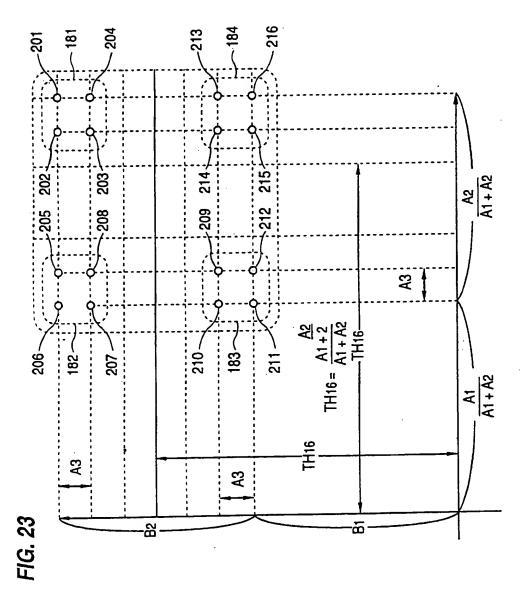
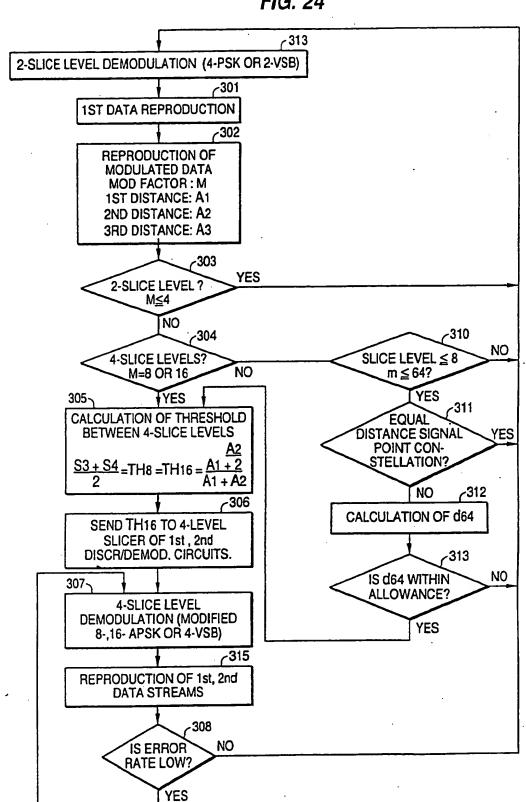


FIG. 22









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FIG. 25(a)

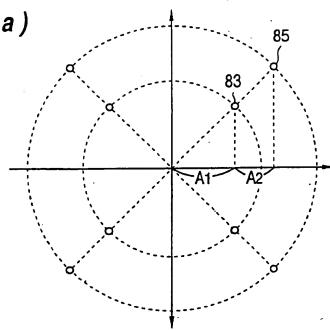
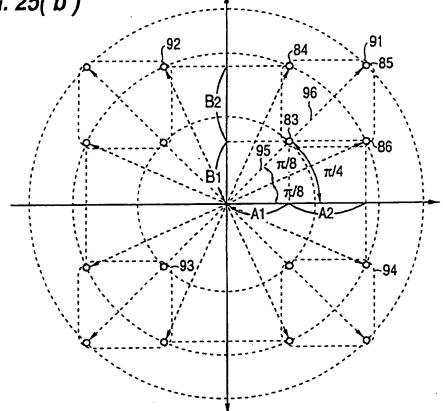
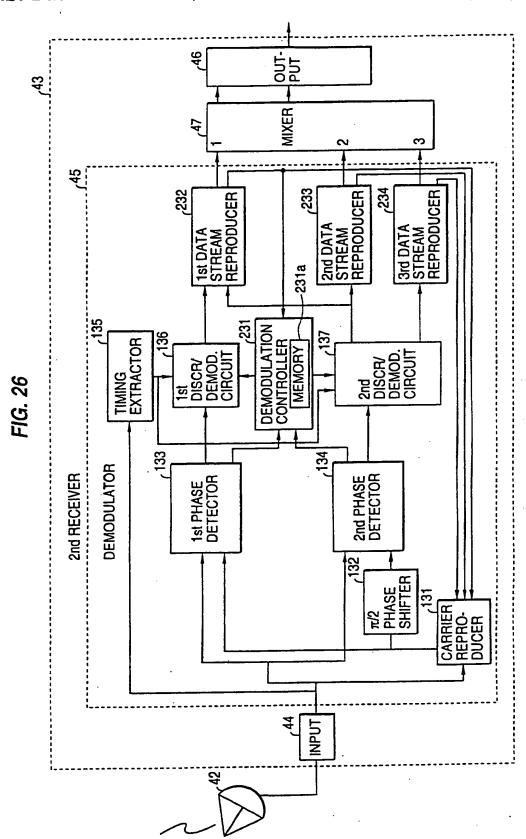


FIG. 25(b)





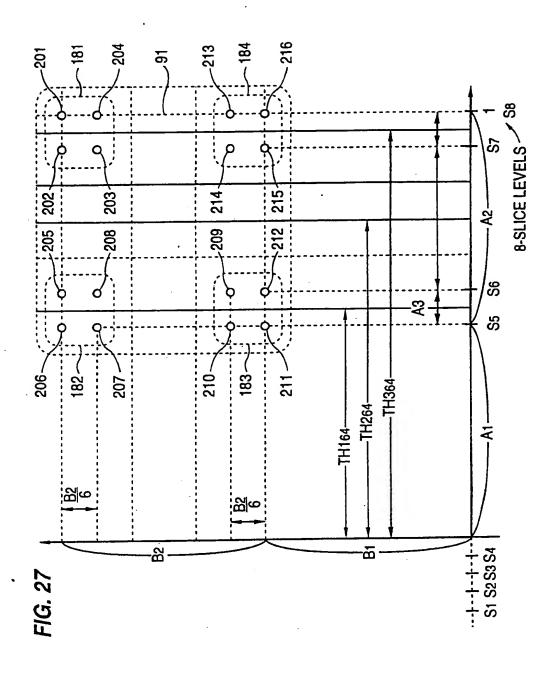
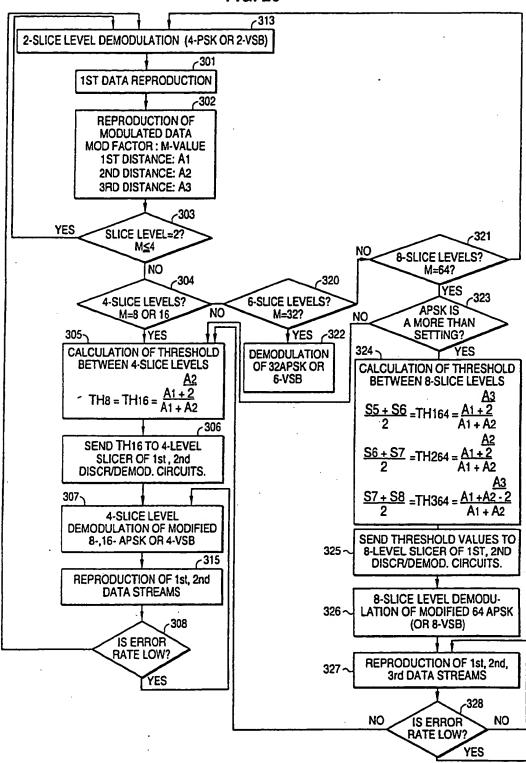
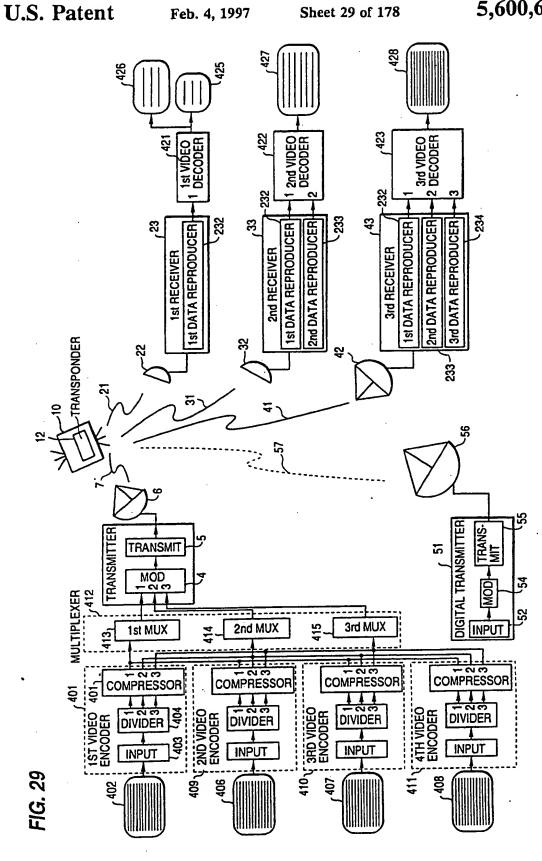
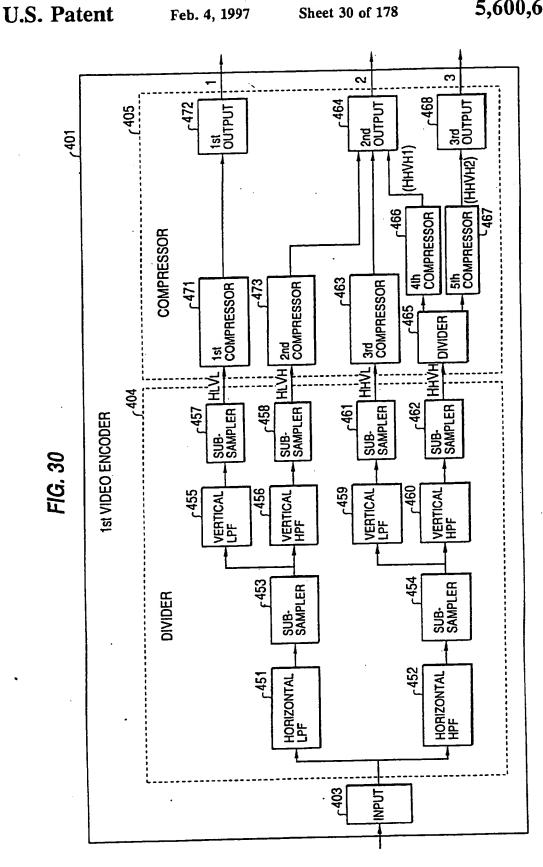
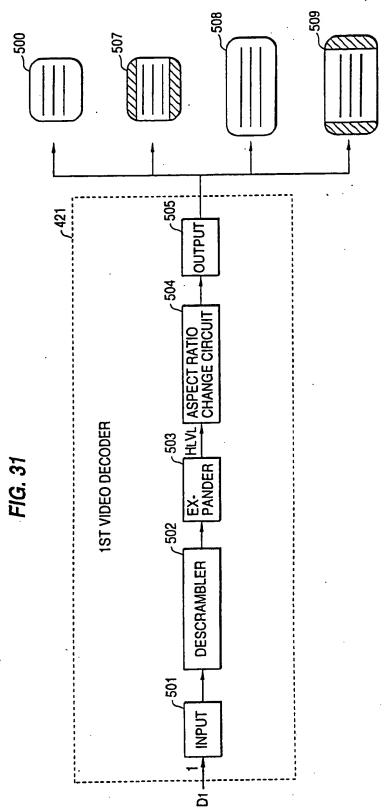


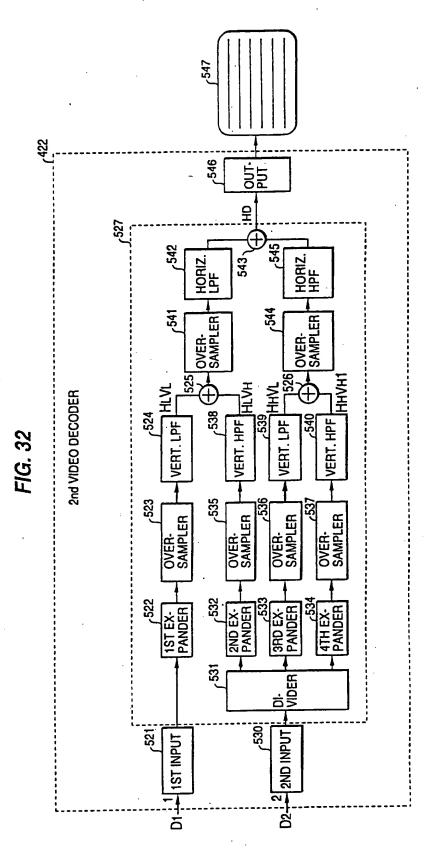
FIG. 28

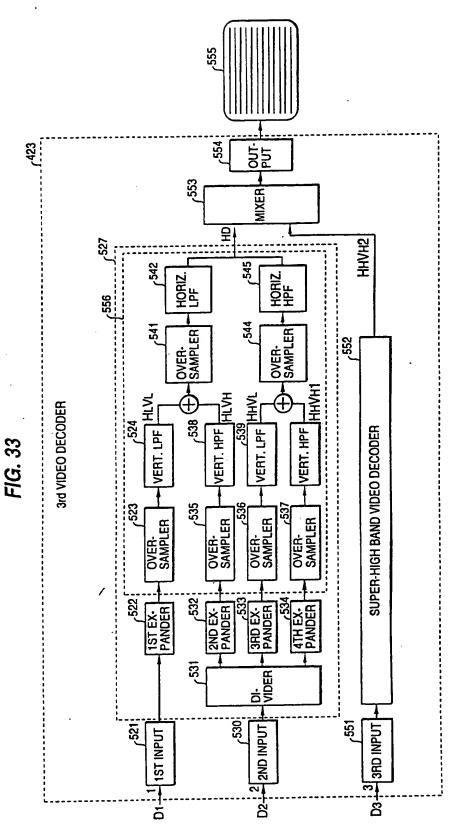


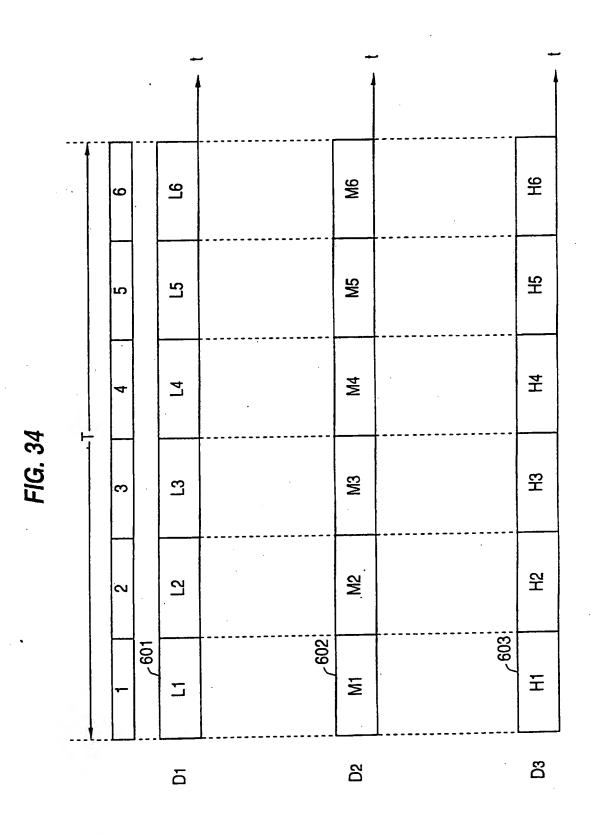


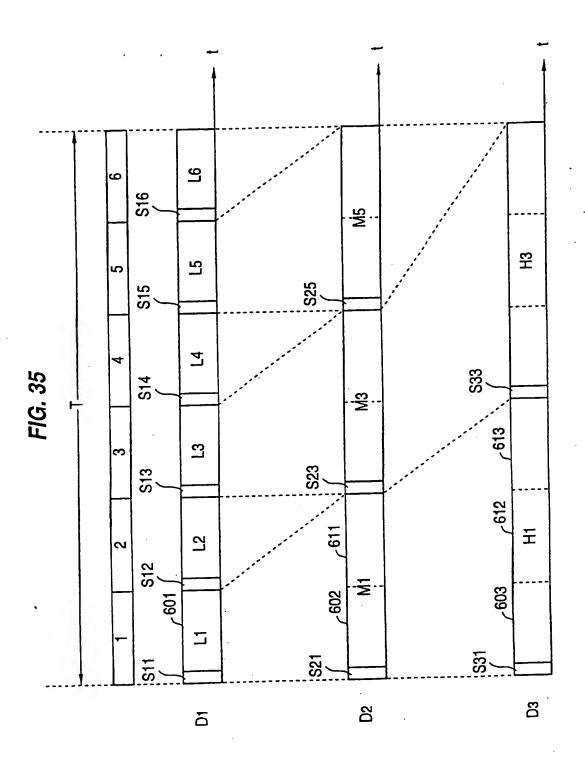




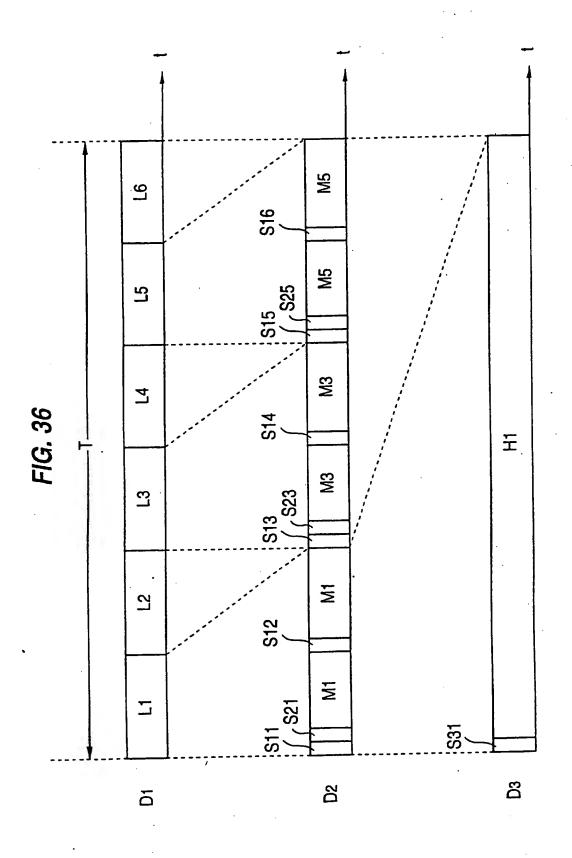


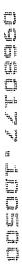


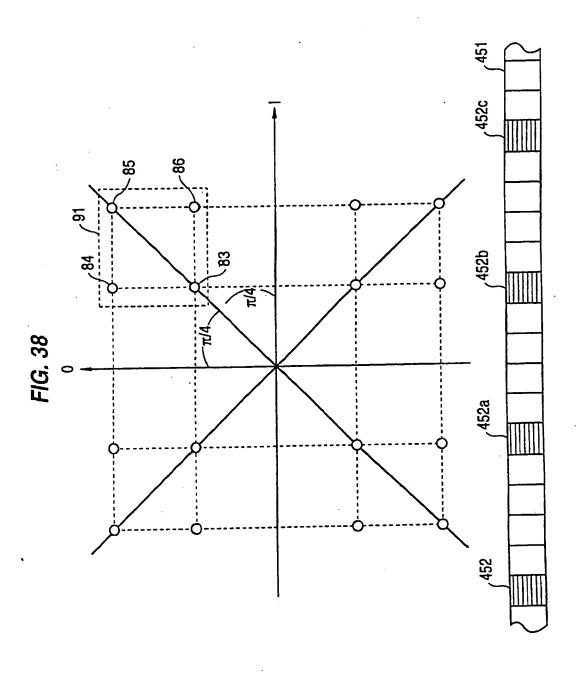


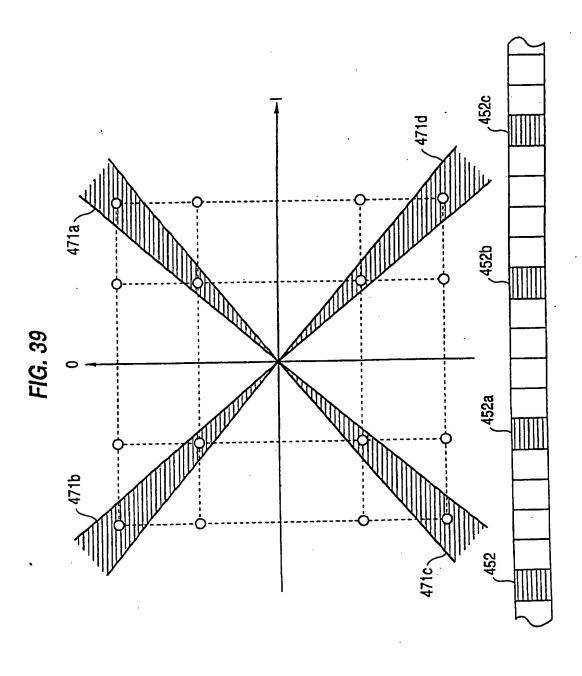


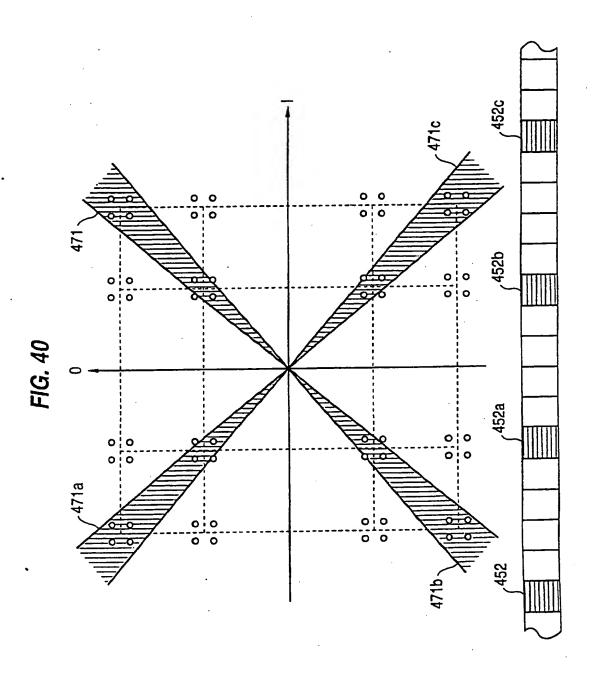


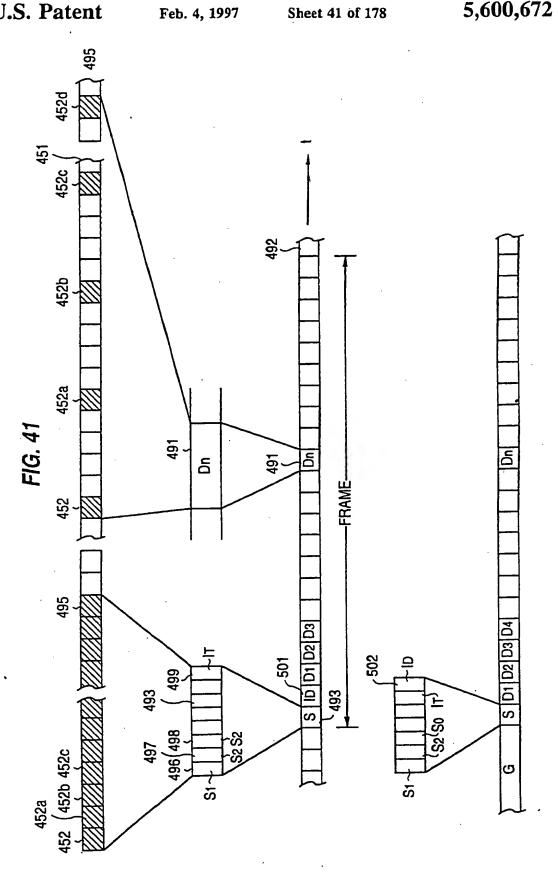


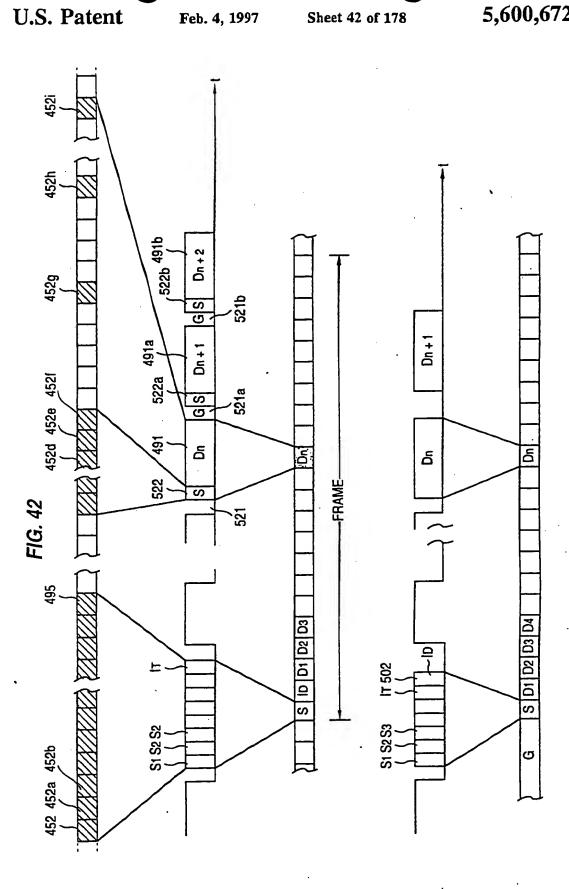


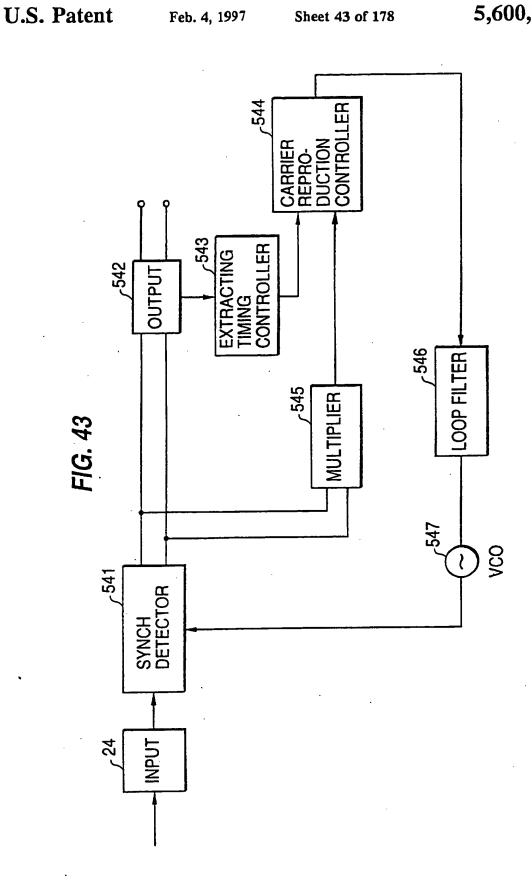




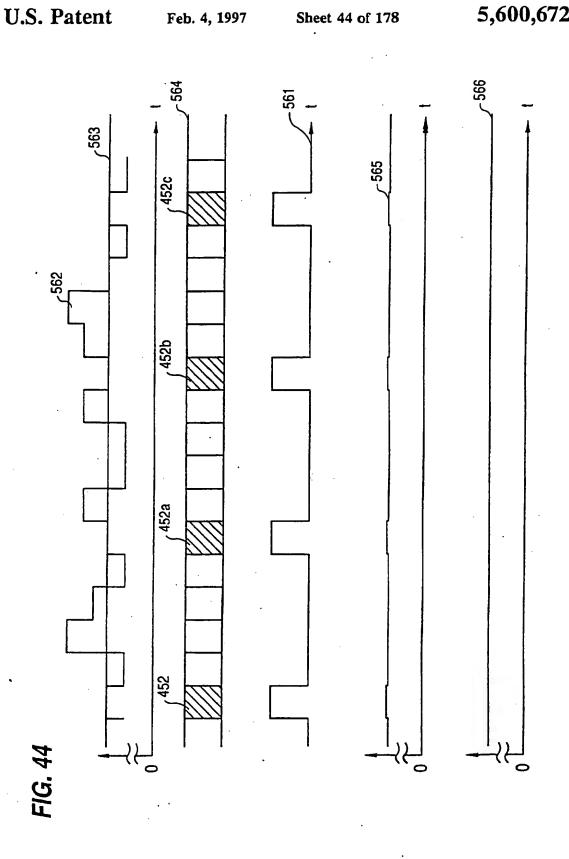


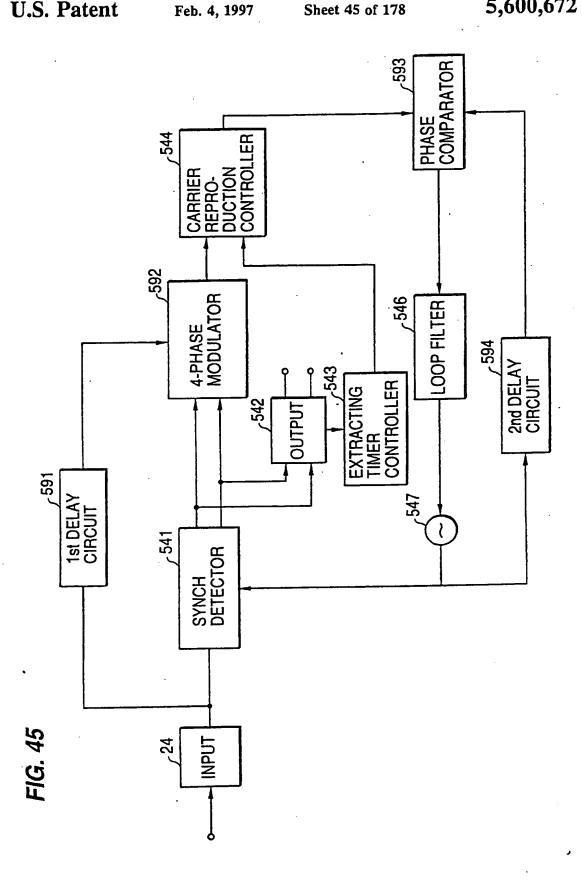




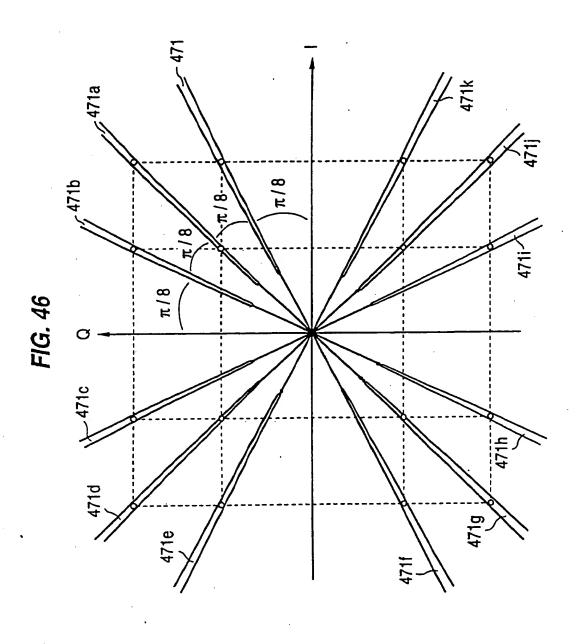












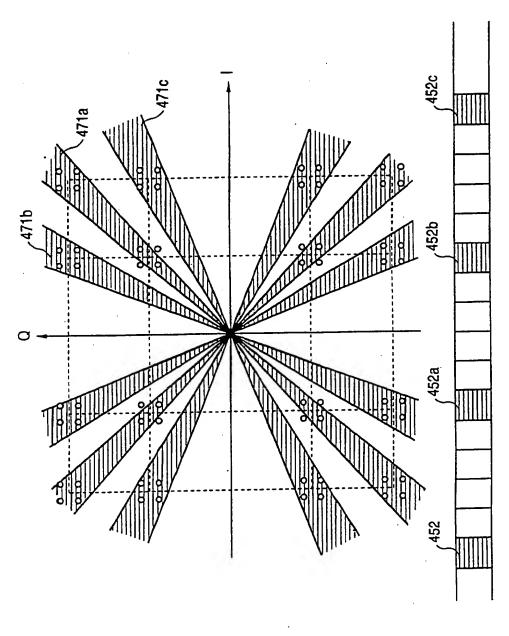


FIG. 47

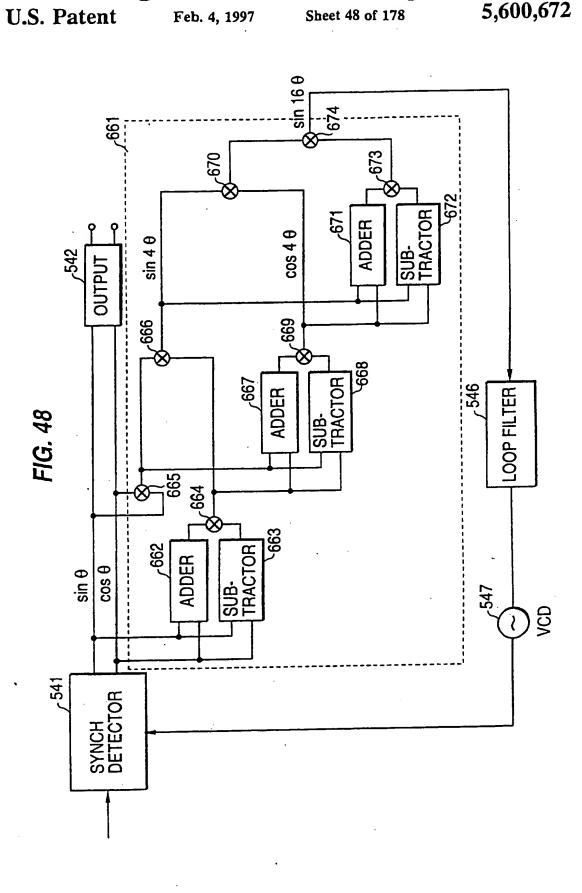
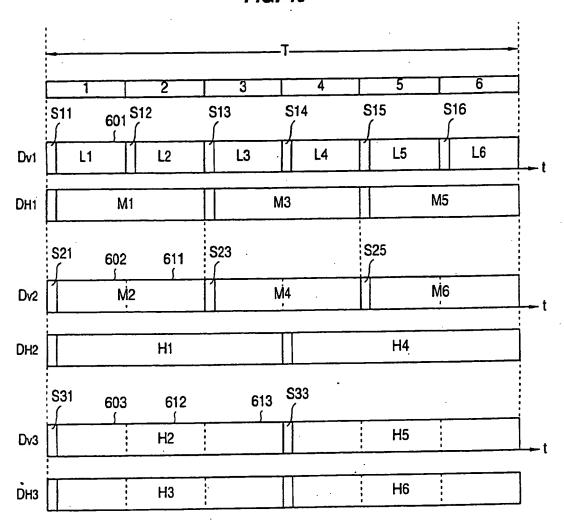
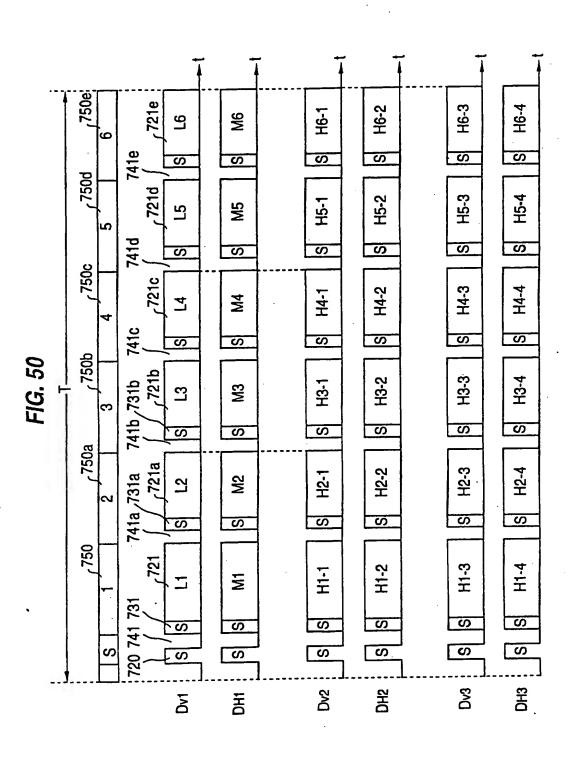
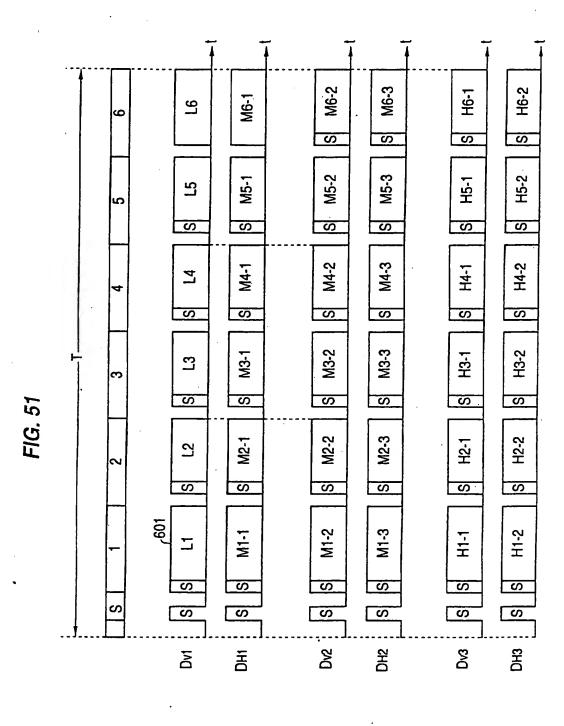


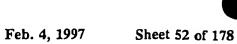
FIG. 49

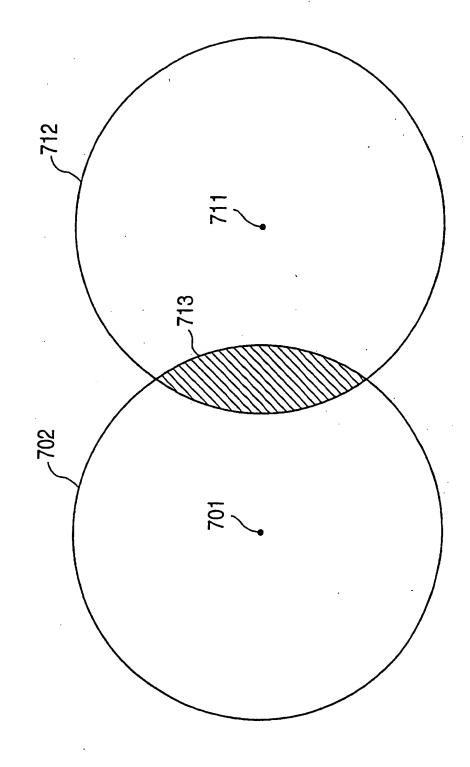




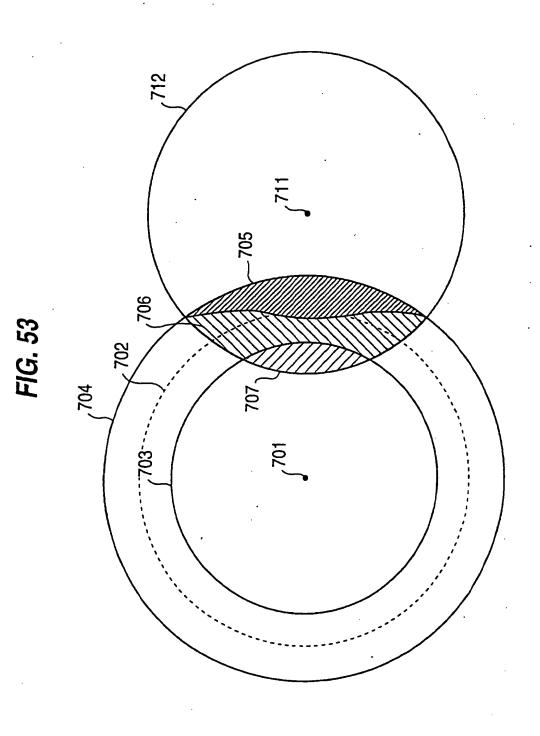
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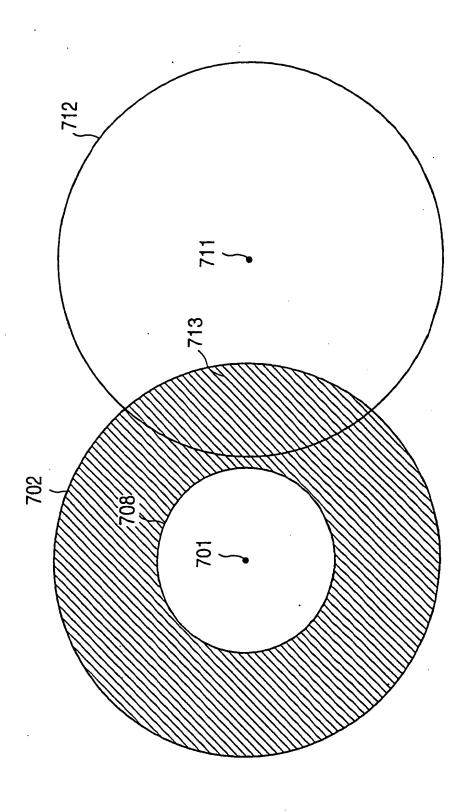




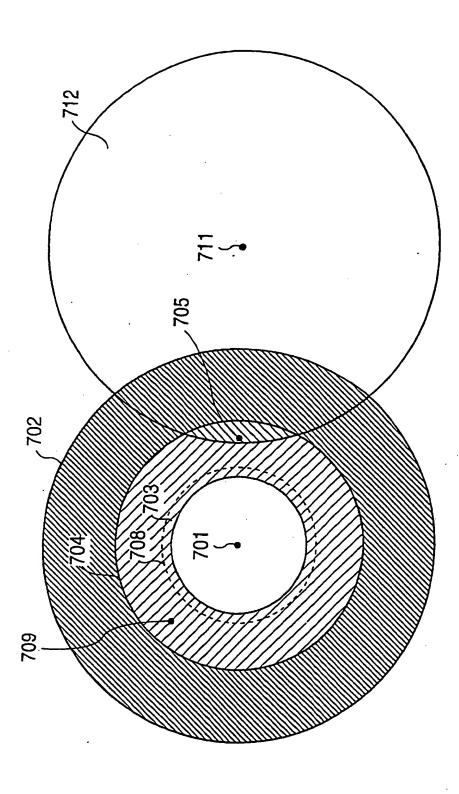




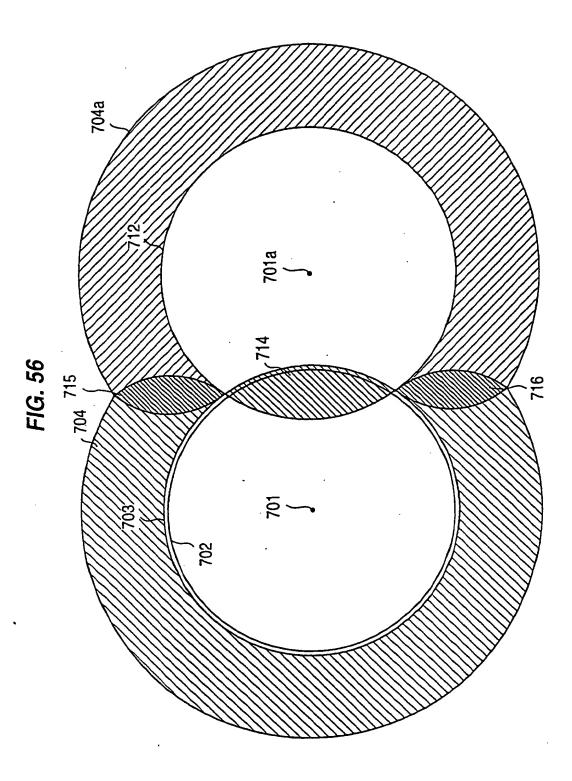








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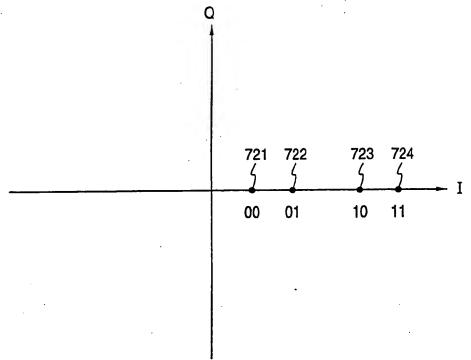
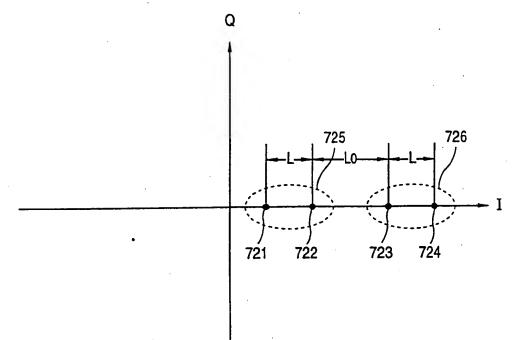


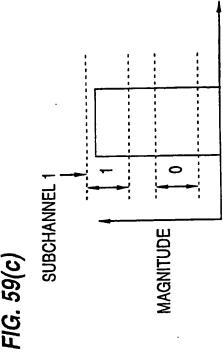
FIG. 58

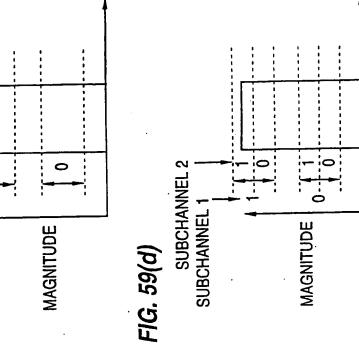


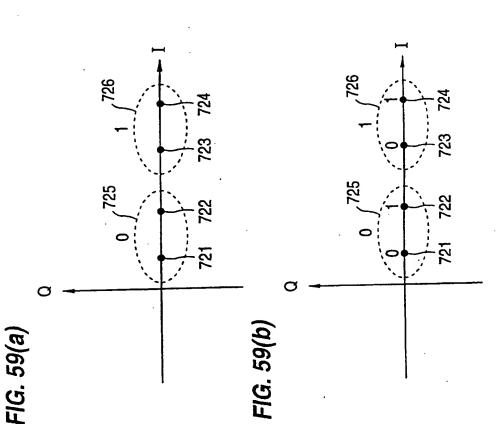
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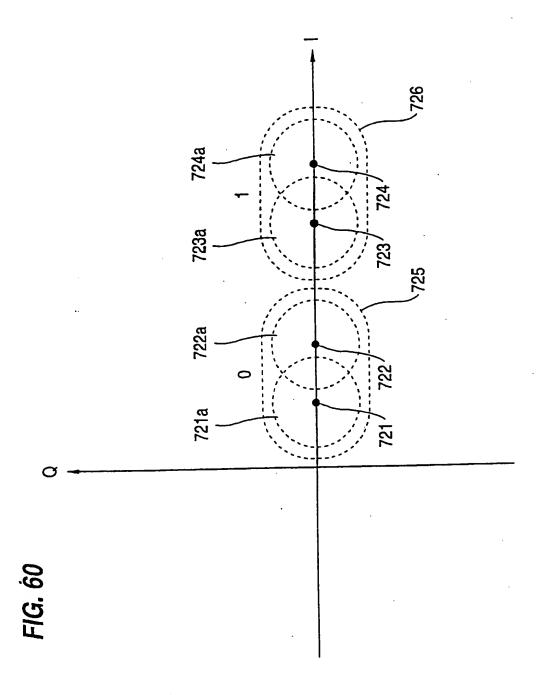
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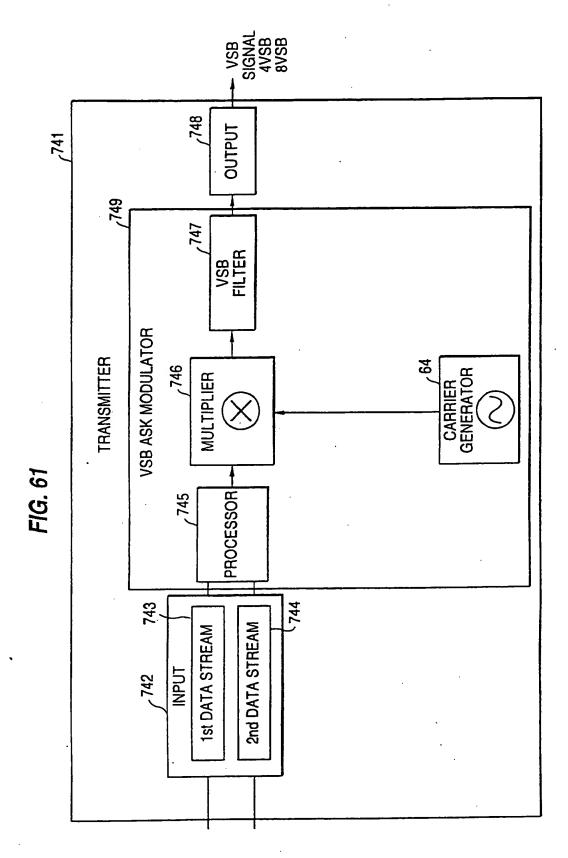
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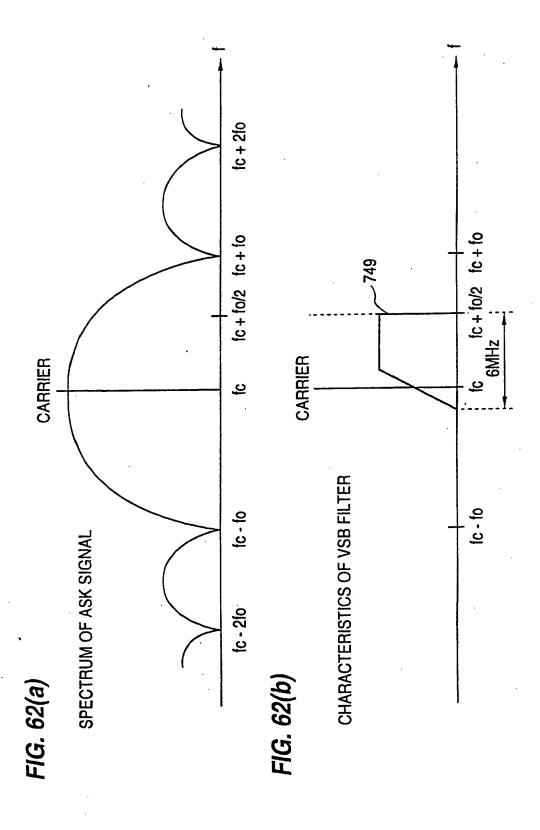


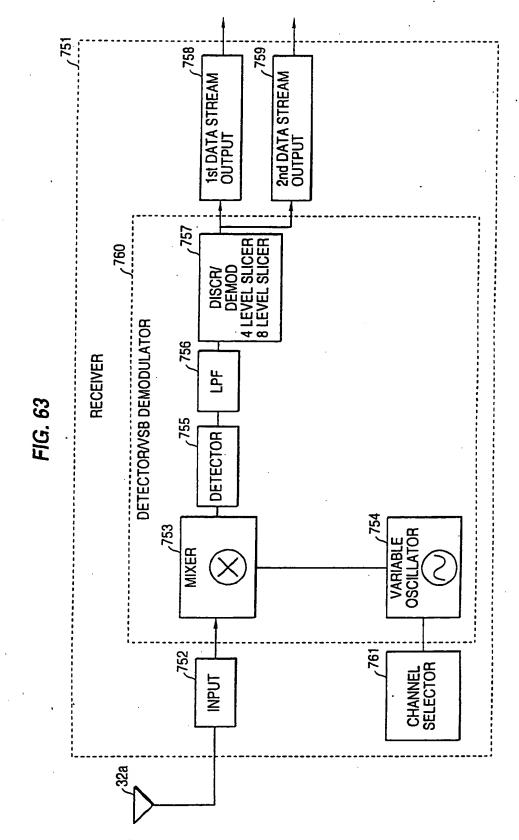


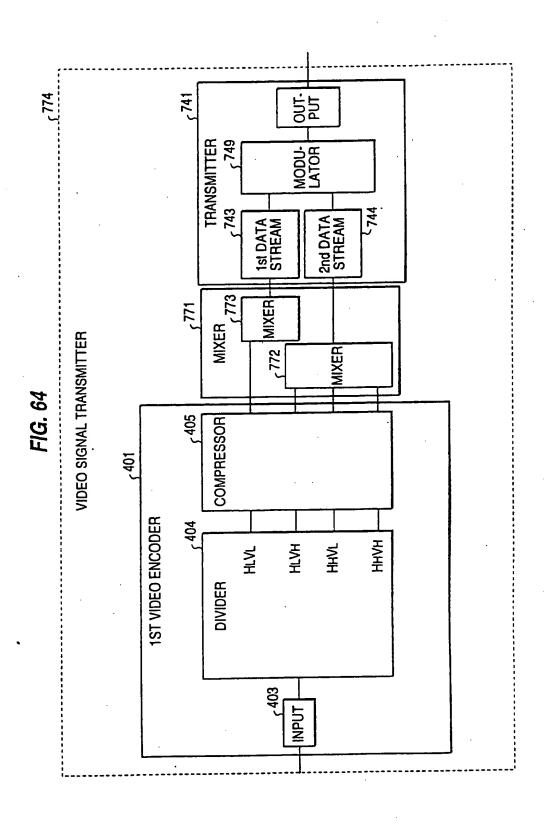


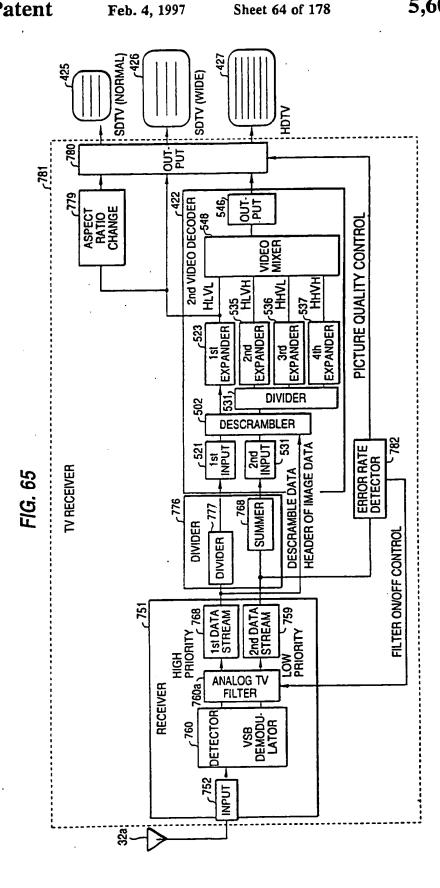


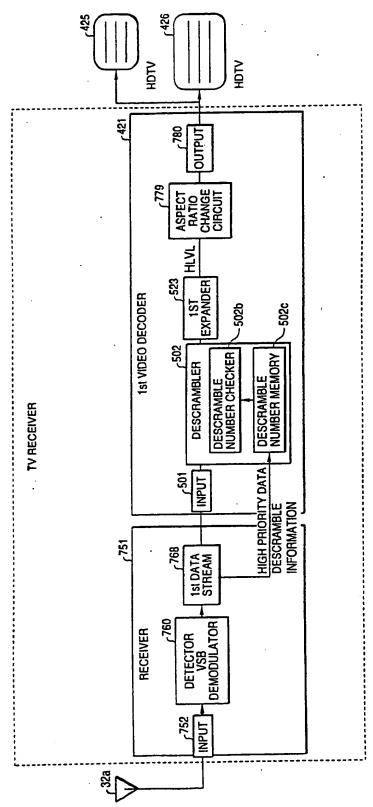
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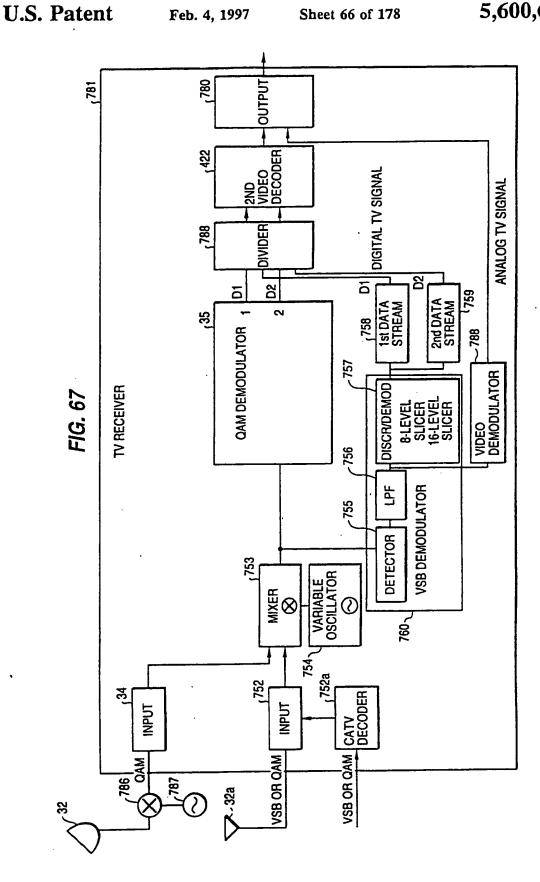


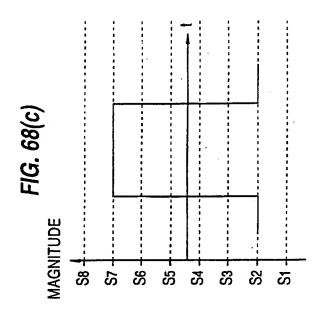


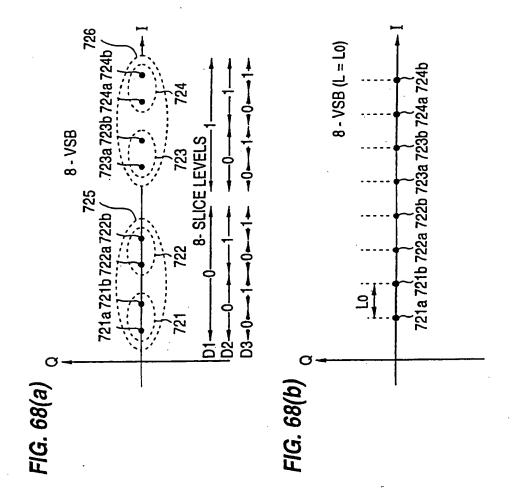


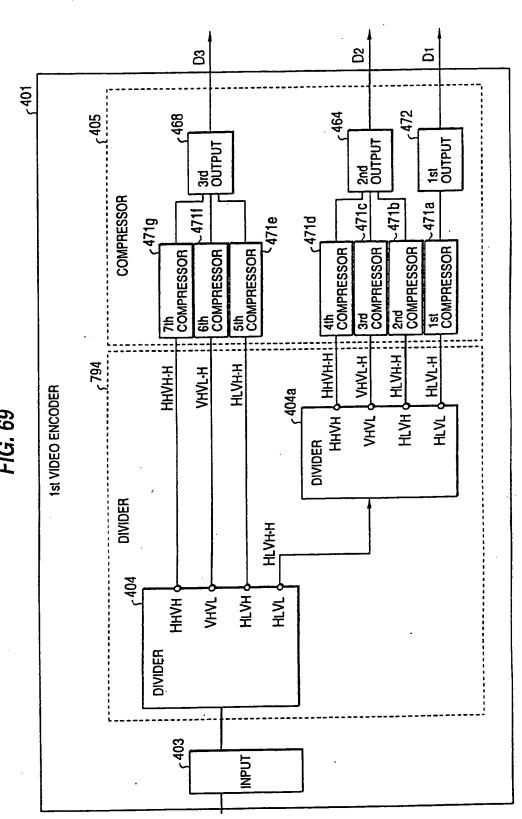


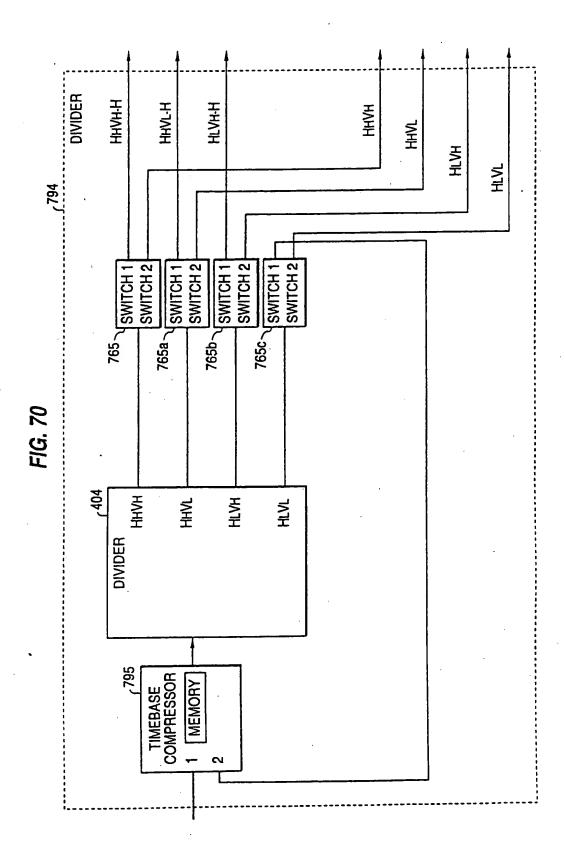


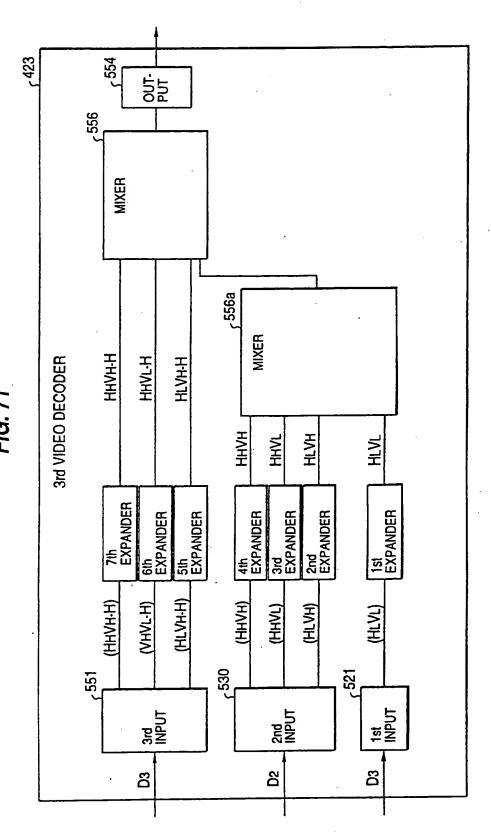


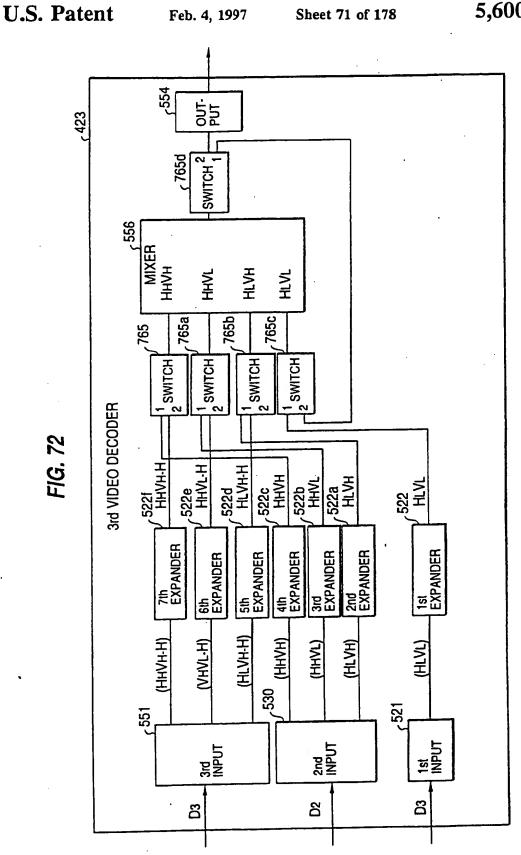












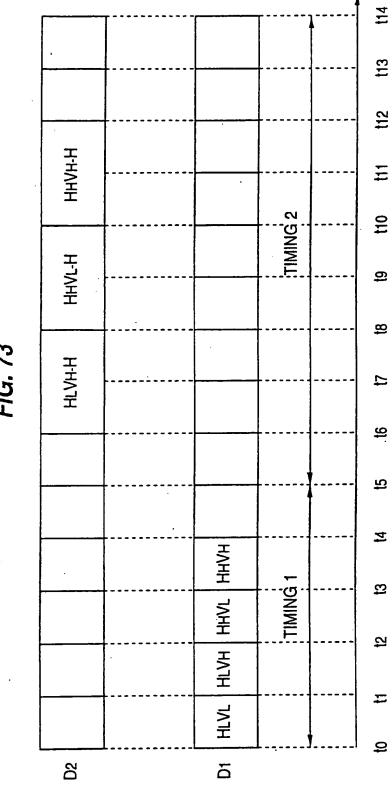
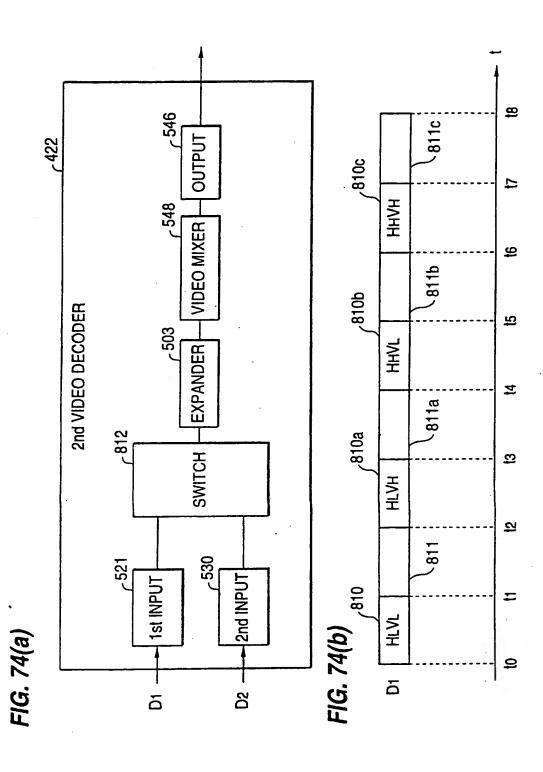


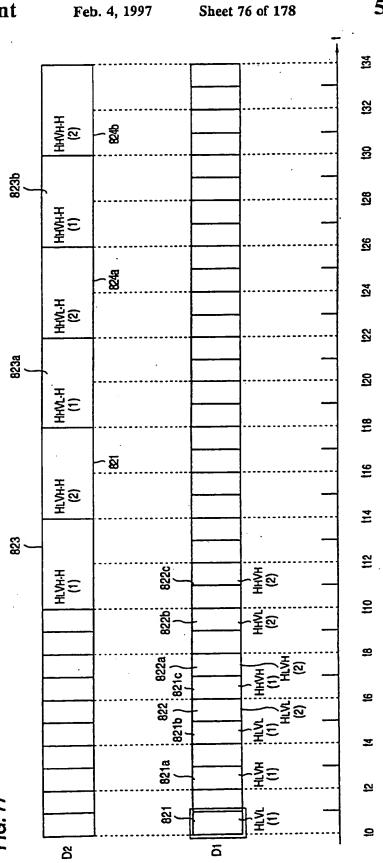
FIG. 73

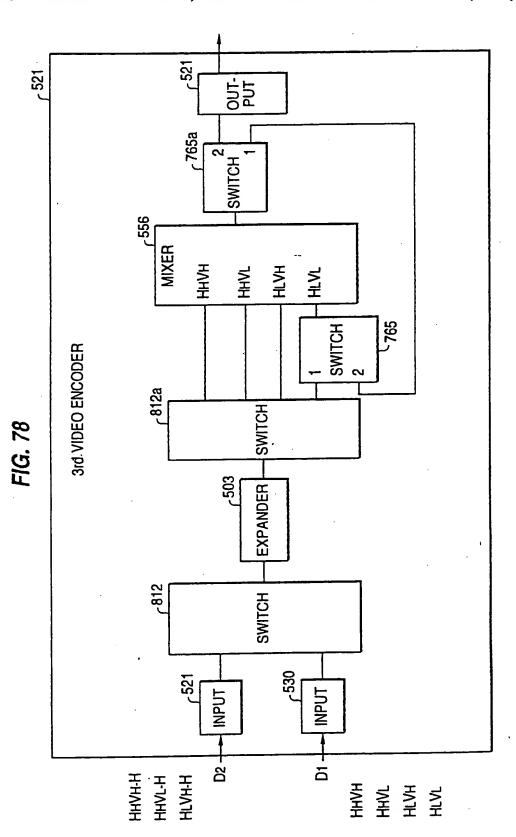


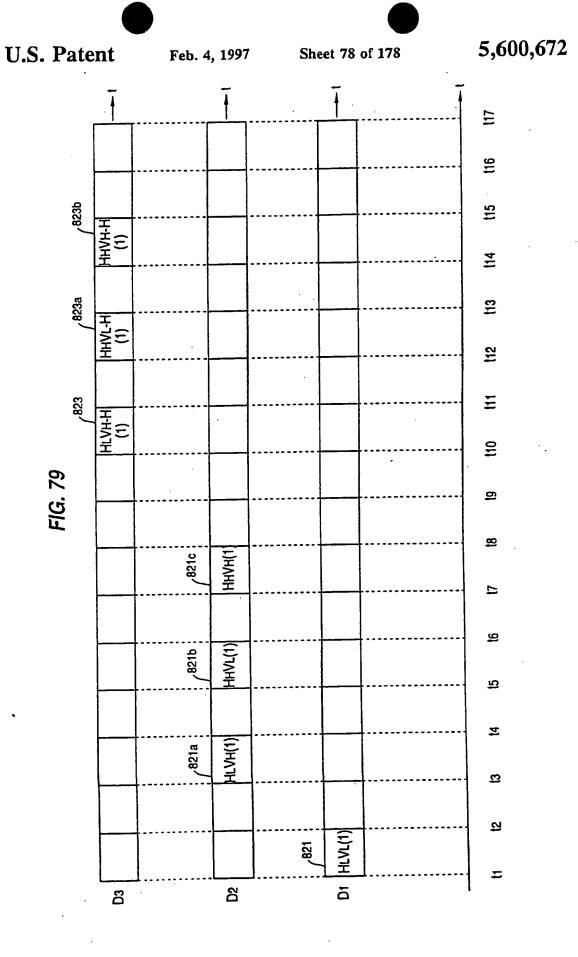


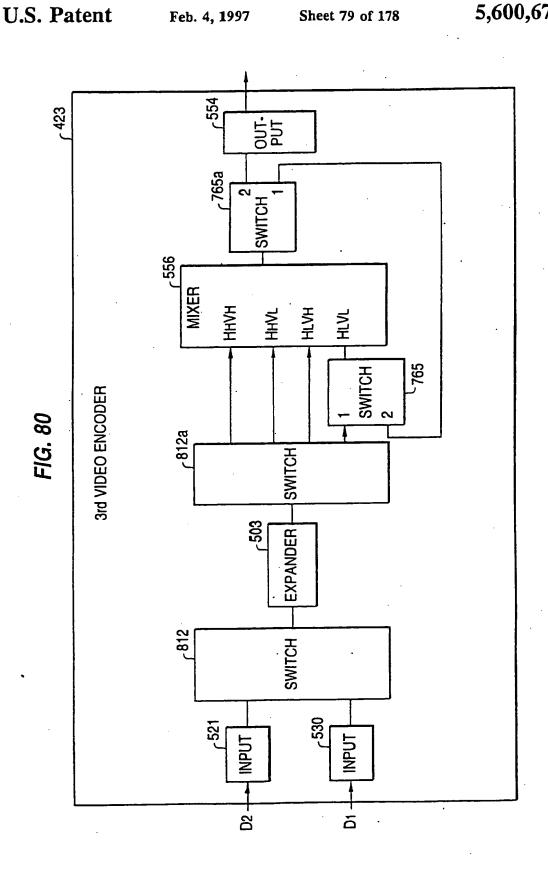
HHVH(2) -822c HHVH(1) HHVL(2) HHVL(1) HLVH(2) -822a HLVH(1) HLVL(2) HLVL(1) 22 5

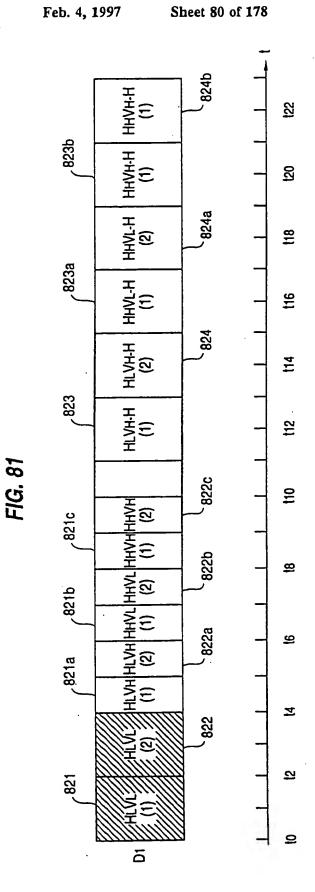
HHVH(2) -821c HHVH(1) HHVL(2) 01-2 821b HHVL(1) FIG. 76 HLVH(2) HLVH(1) HLVL(2) **822** 01-1 HLVL(1) ECC 5

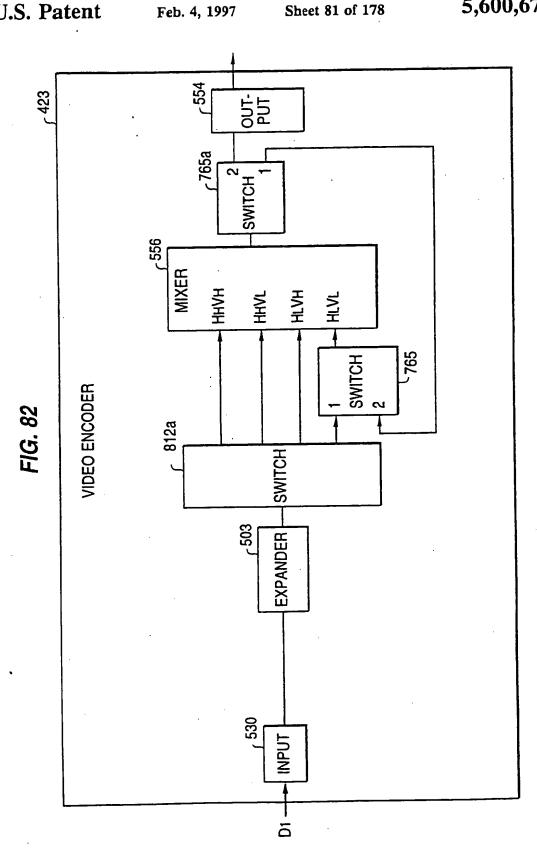


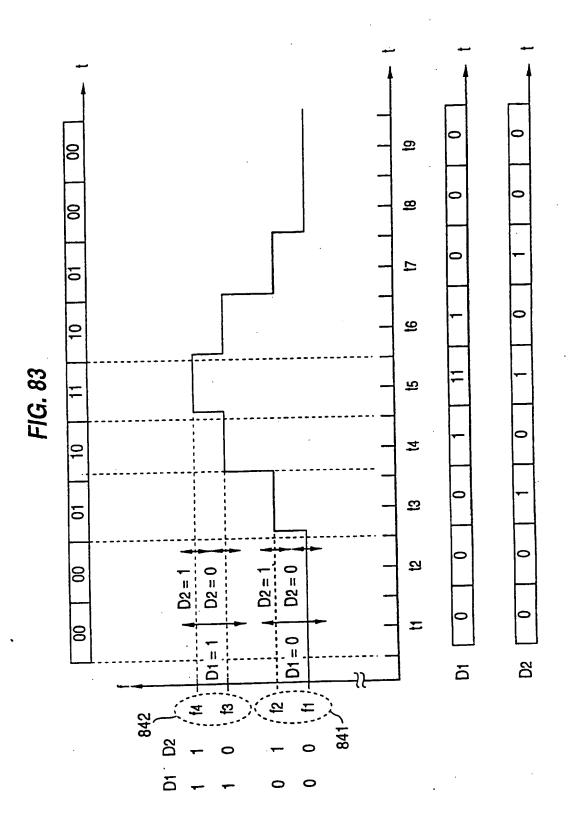




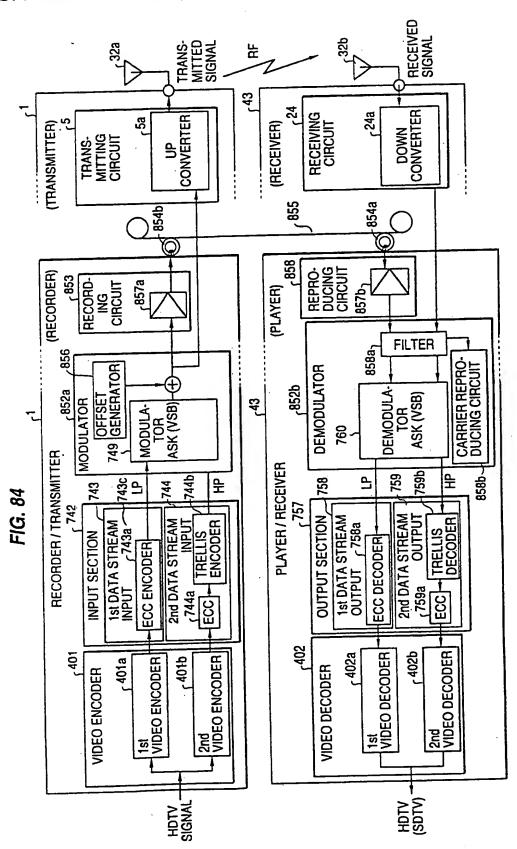




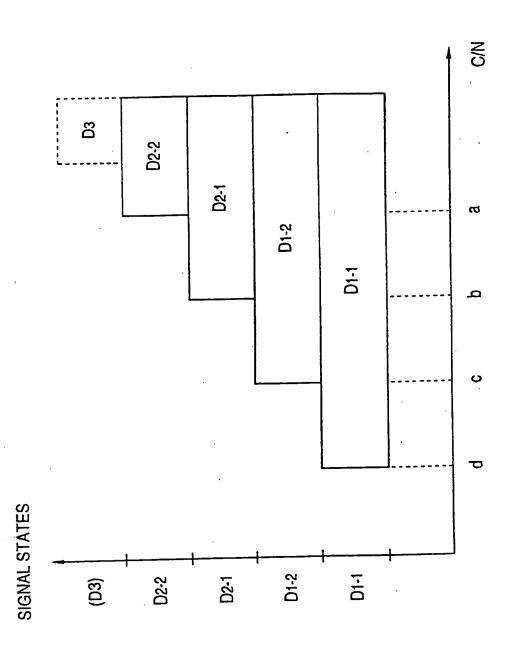


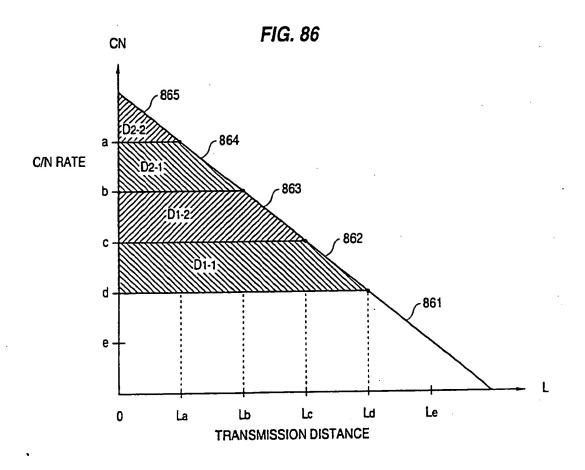


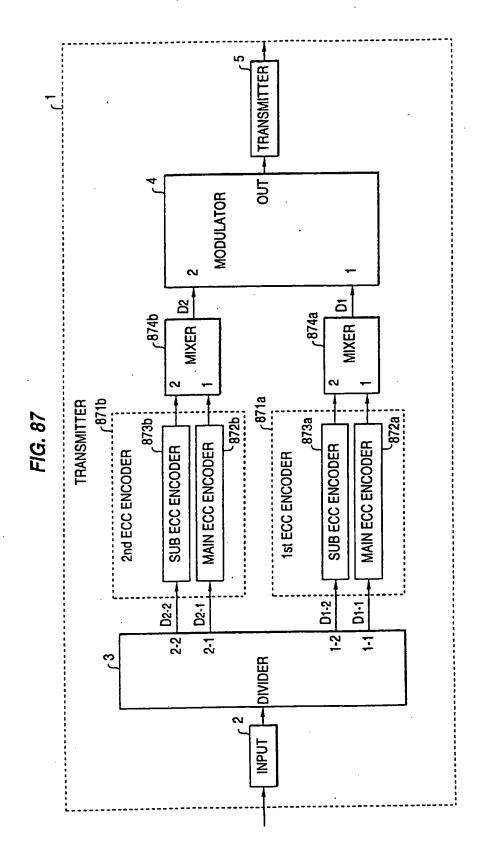
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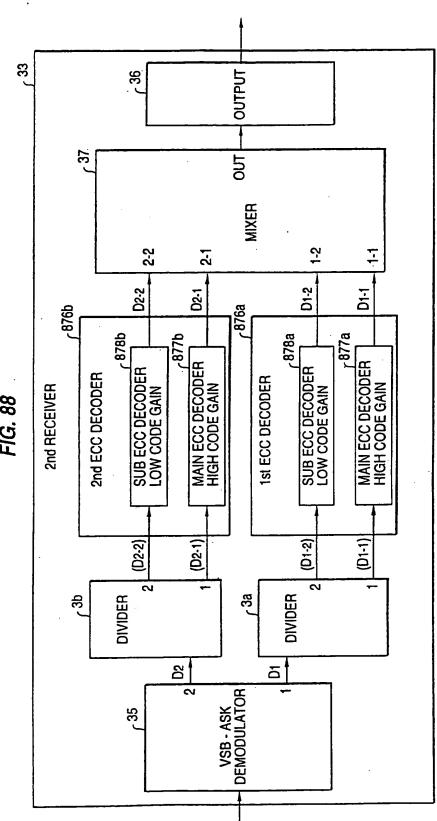
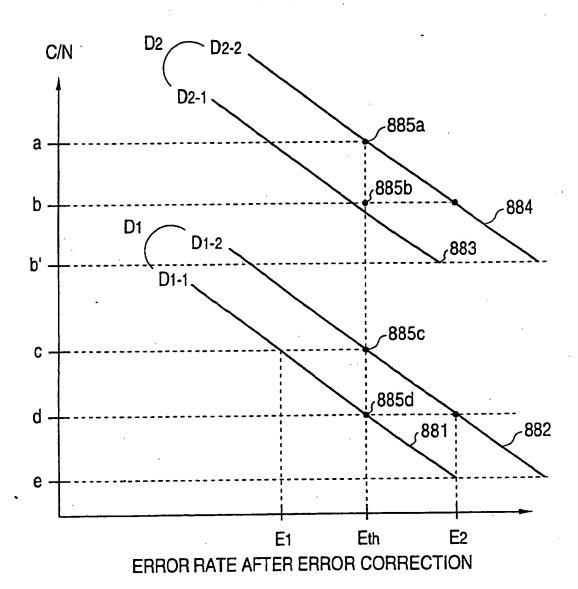
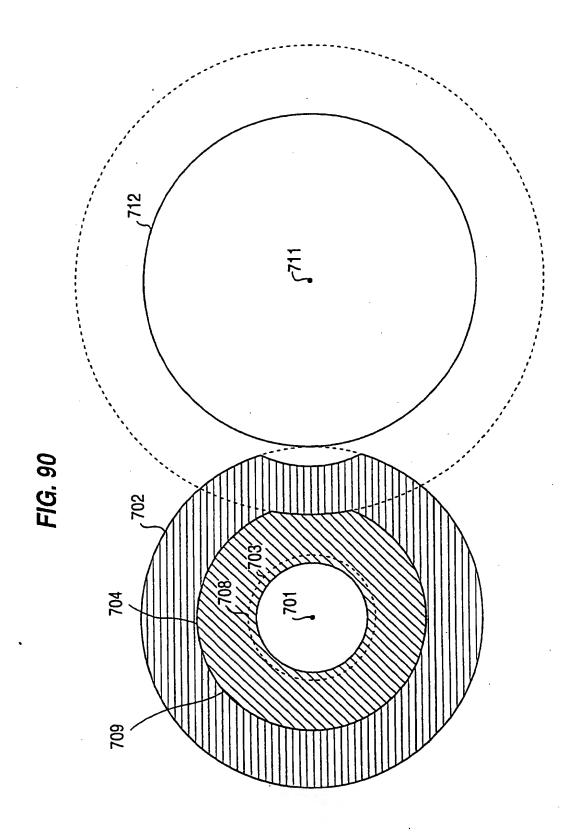
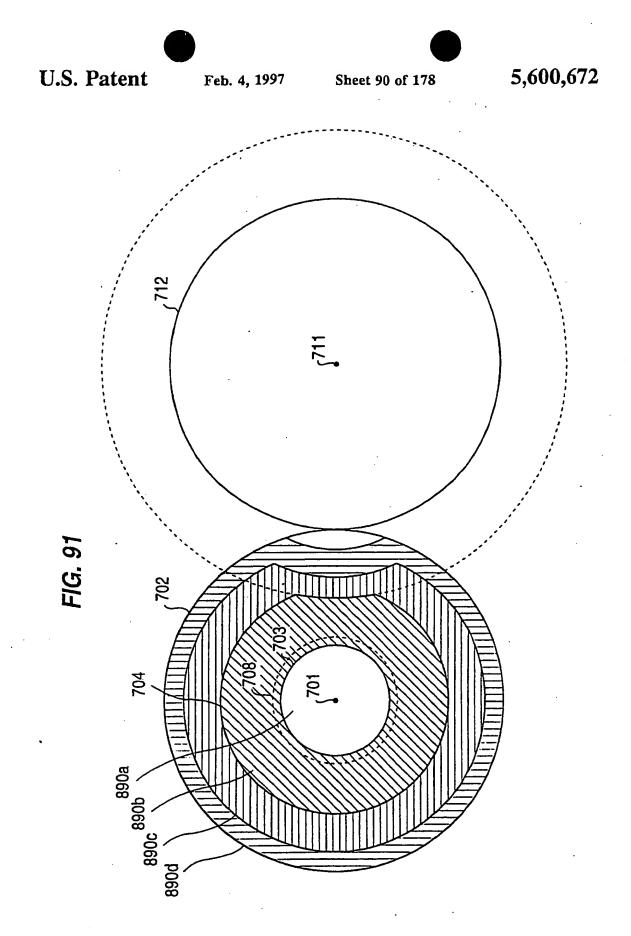


FIG. 89



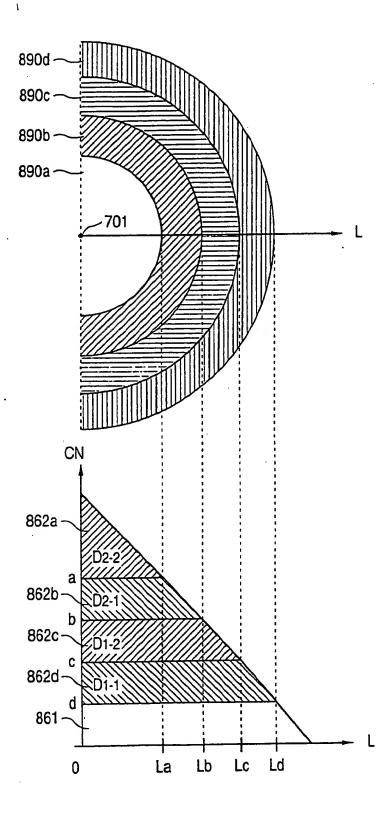
U.S. Patent

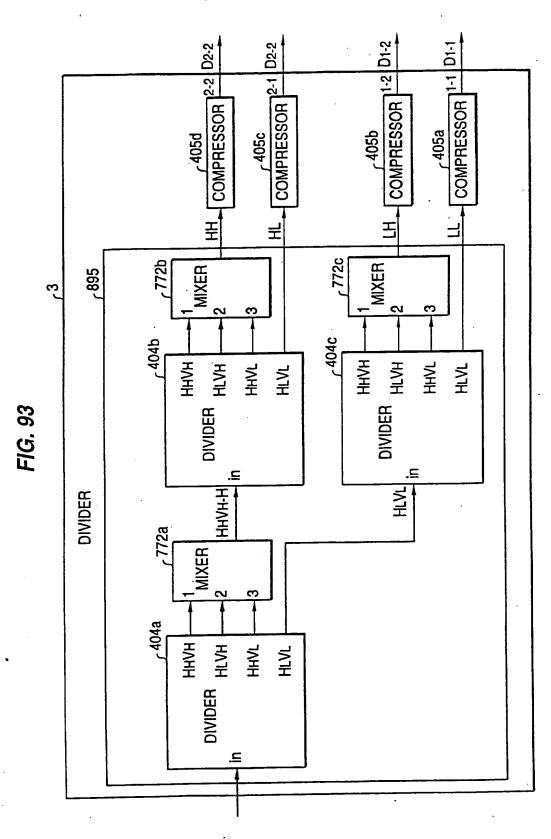




Sheet 91 of 178

FIG. 92





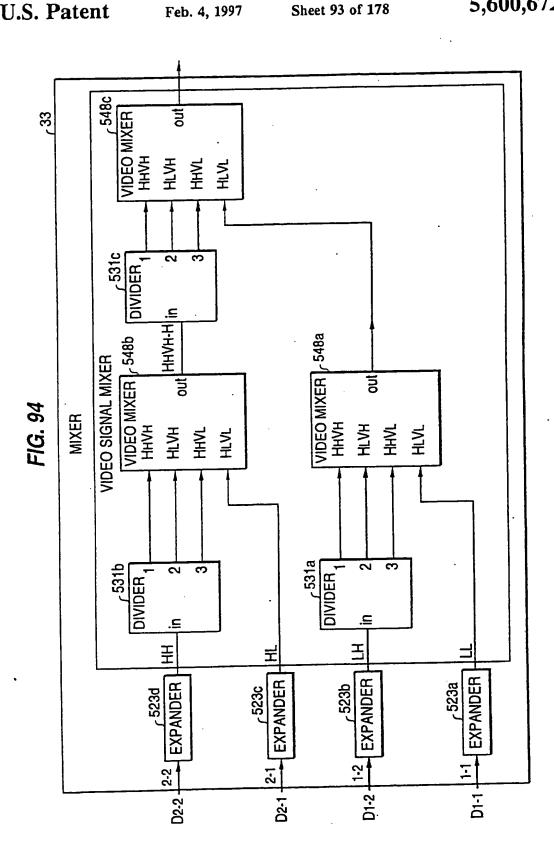
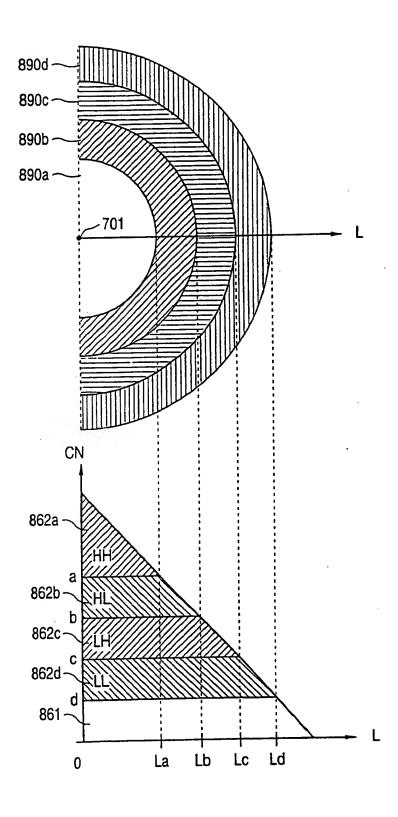
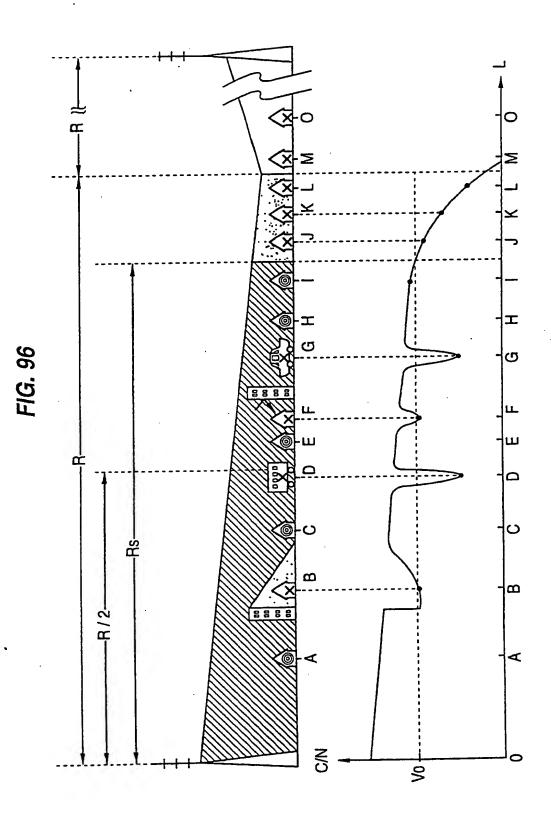


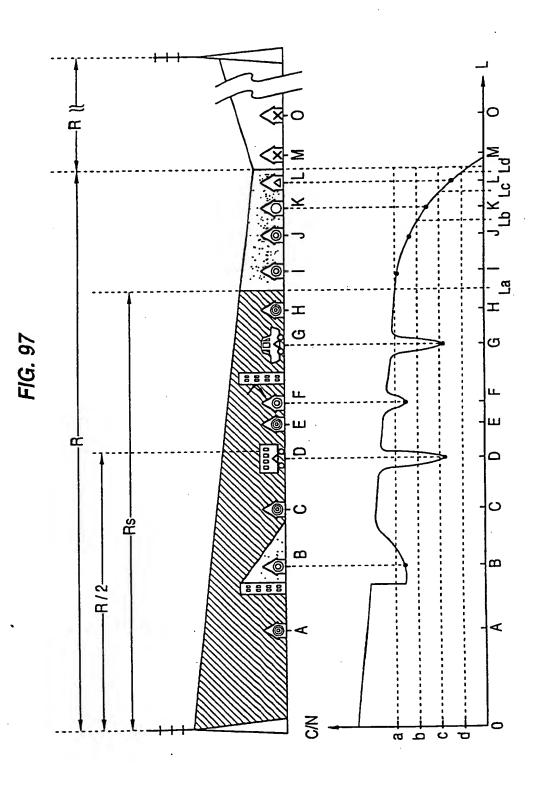
FIG. 95

U.S. Patent

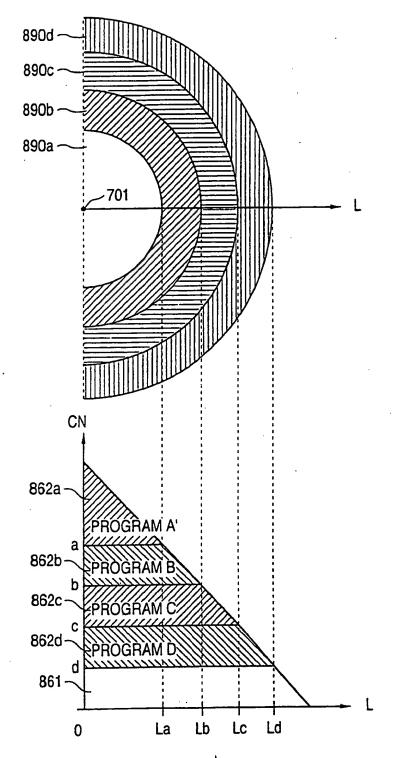


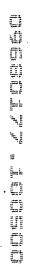












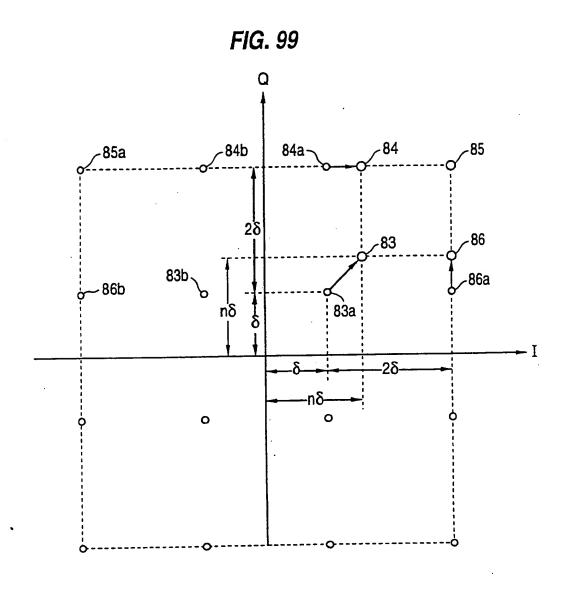


FIG. 100

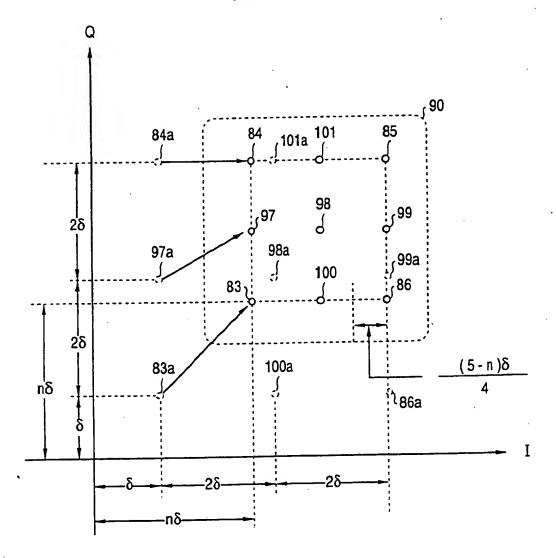


FIG. 101

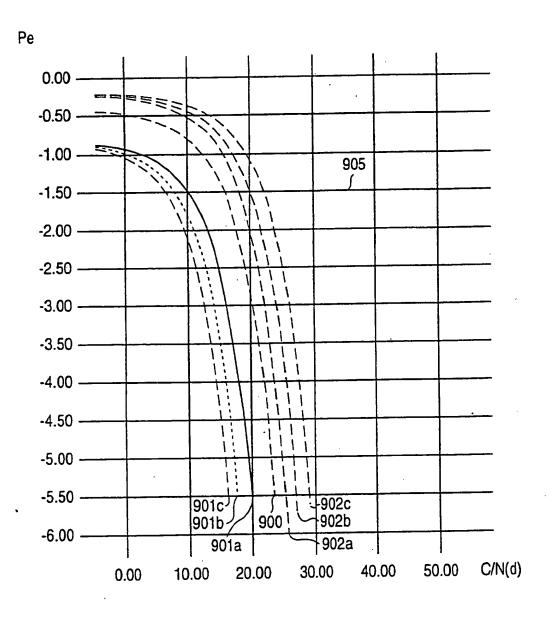


FIG. 102

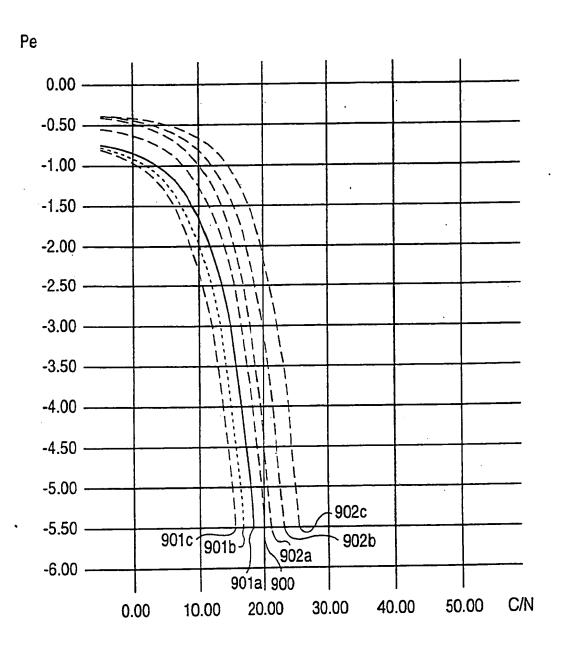


FIG. 103

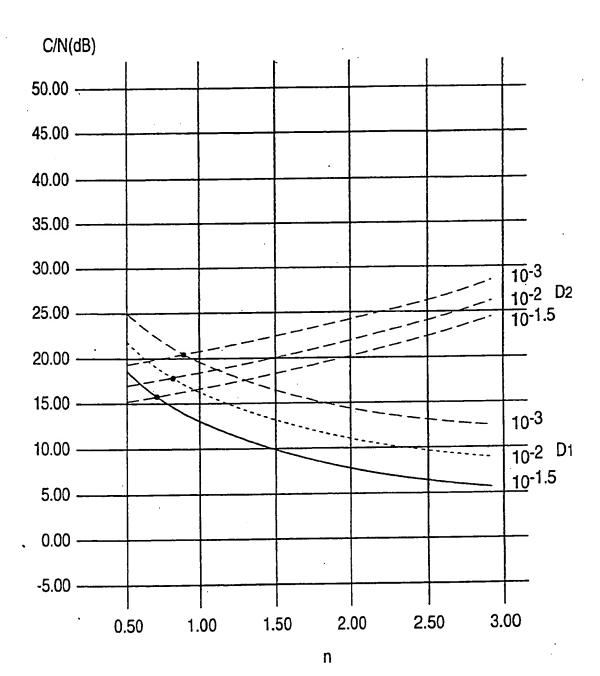
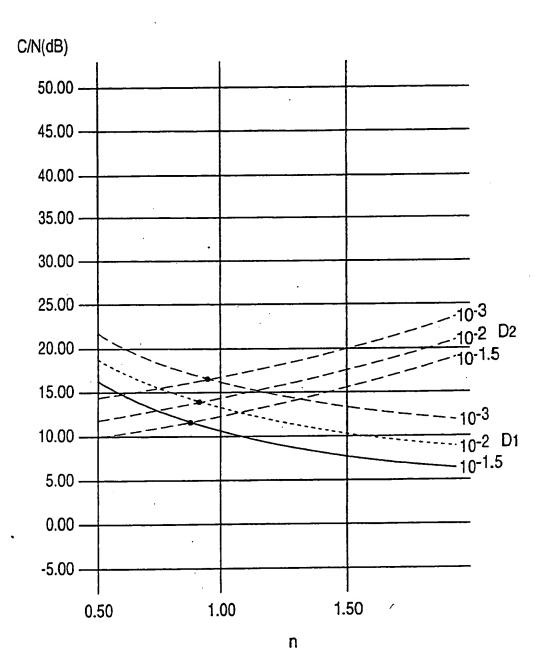
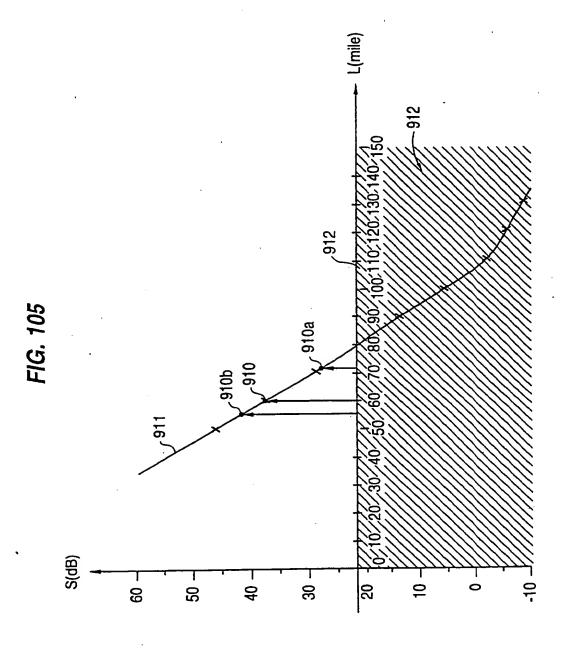
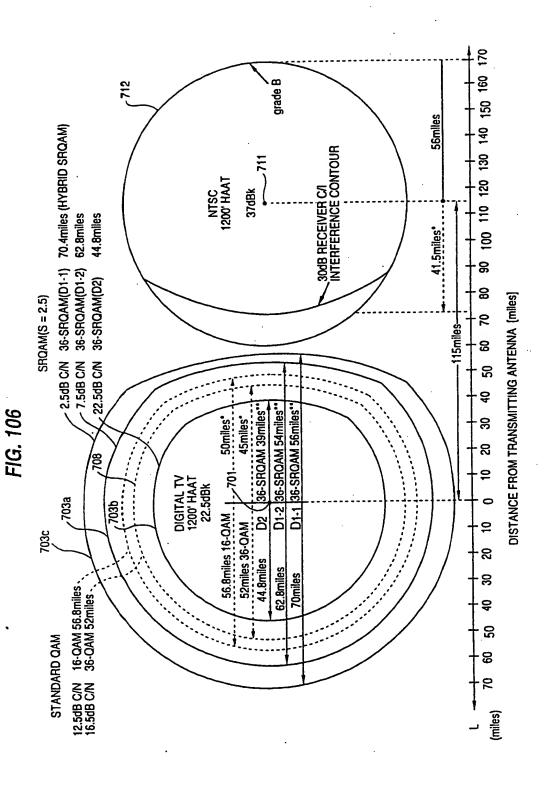


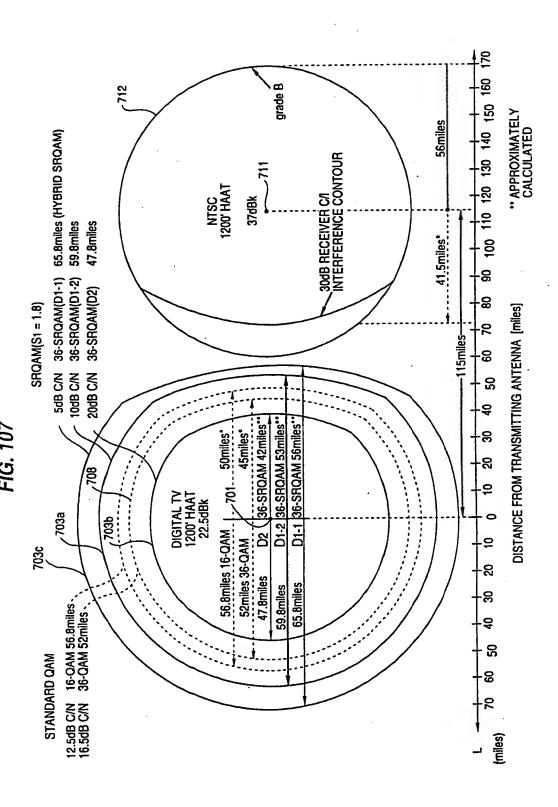
FIG. 104





Feb. 4, 1997



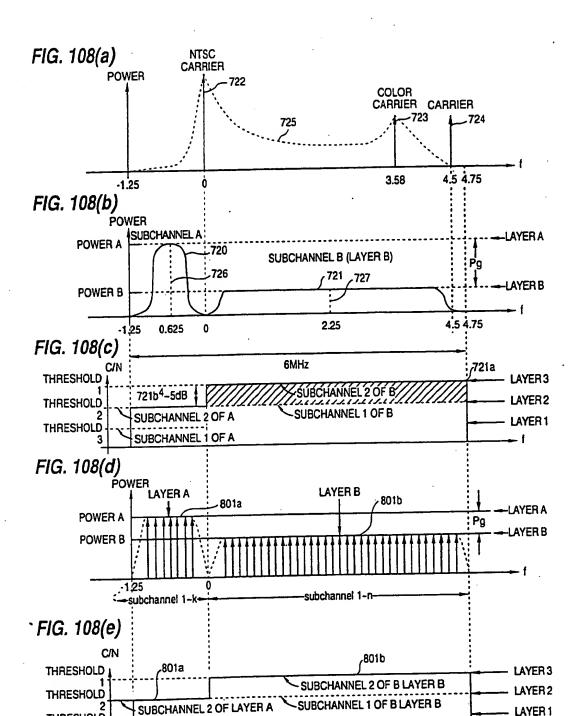


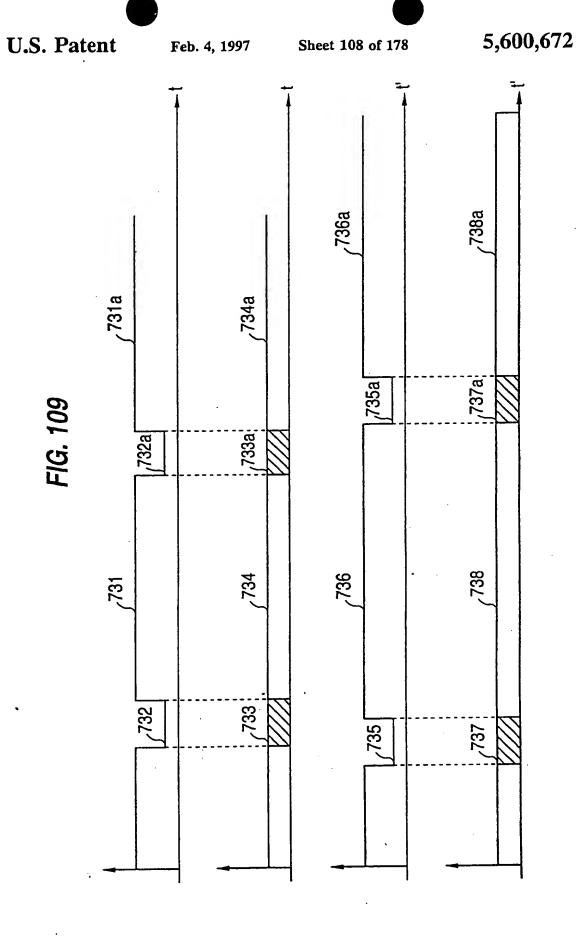
LAYER 1

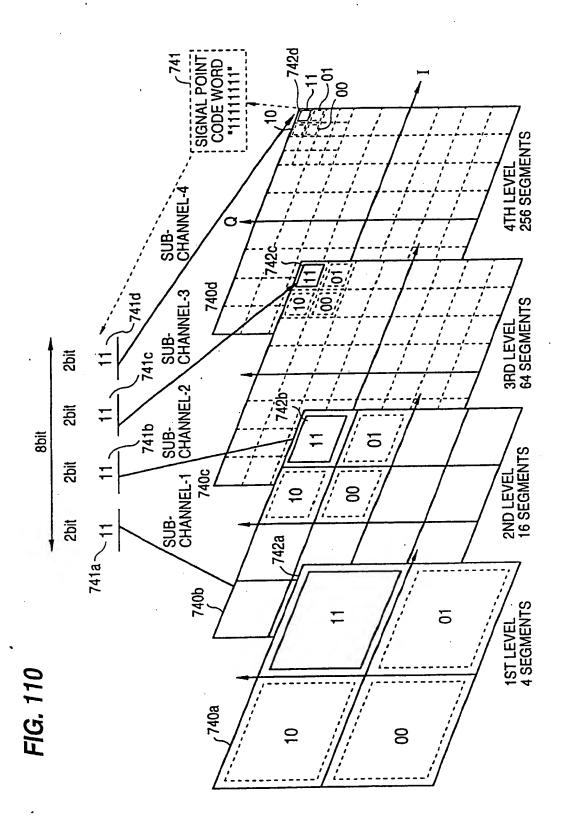
Feb. 4, 1997

THRESHOLD

SUBCHANNEL 1 OF LAYER A







SUBCHANNEL-1 (SRQAM:D1 = 2bit)

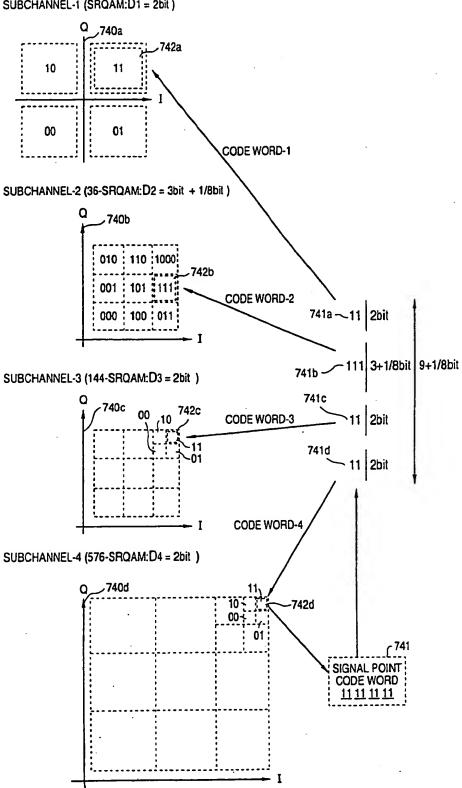
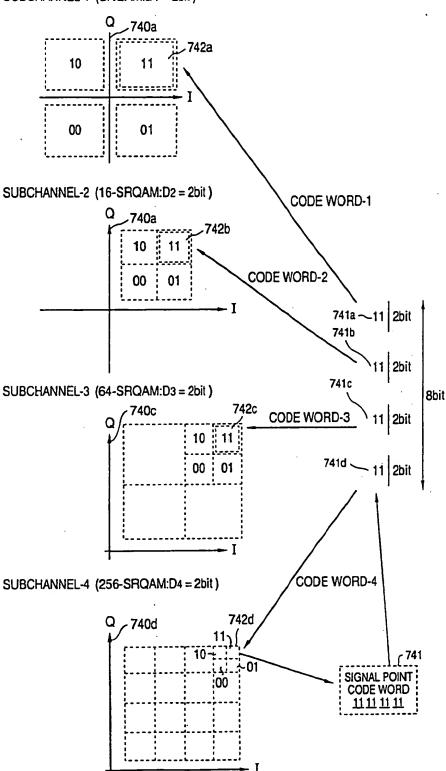
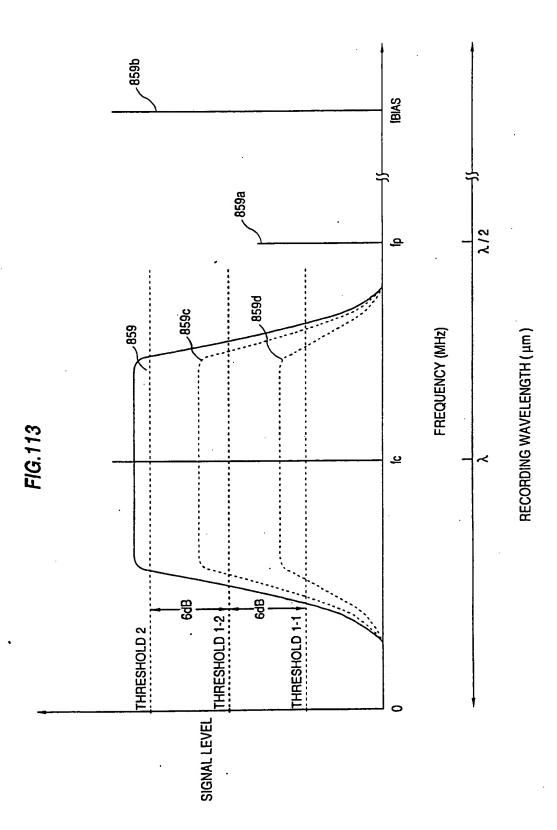
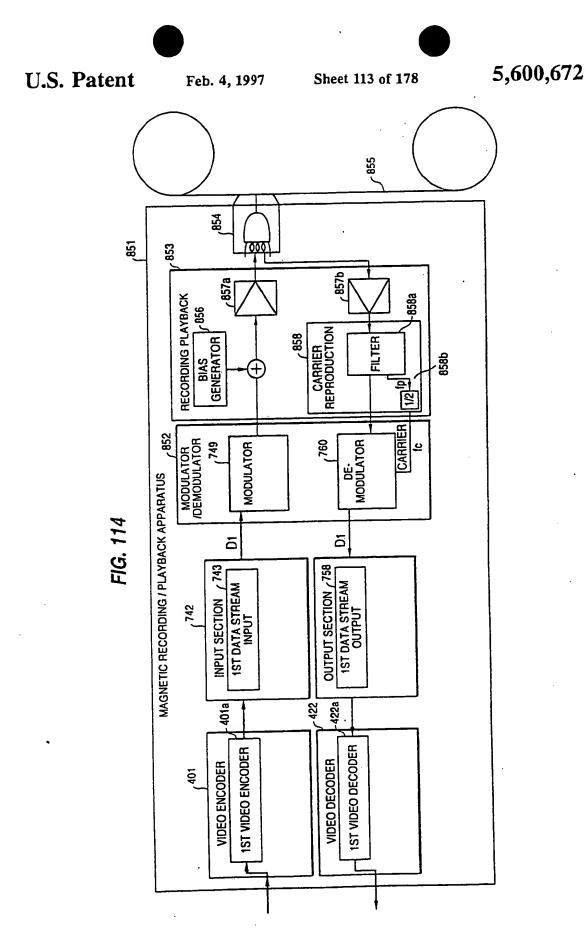


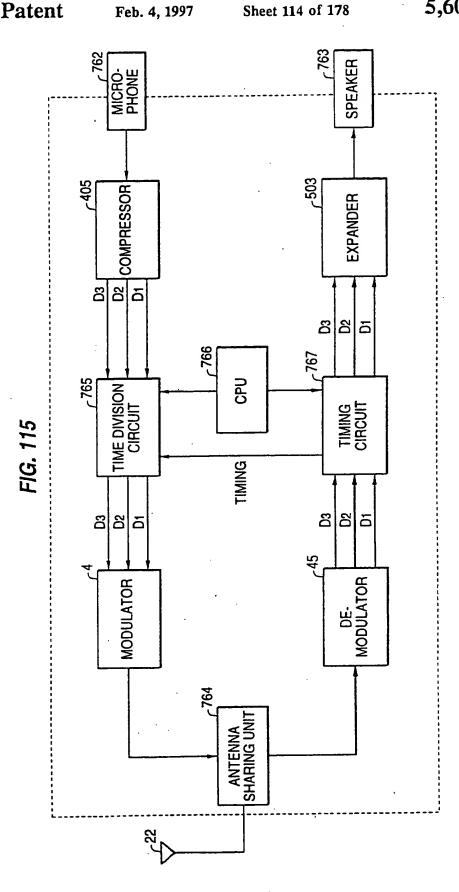
FIG. 112

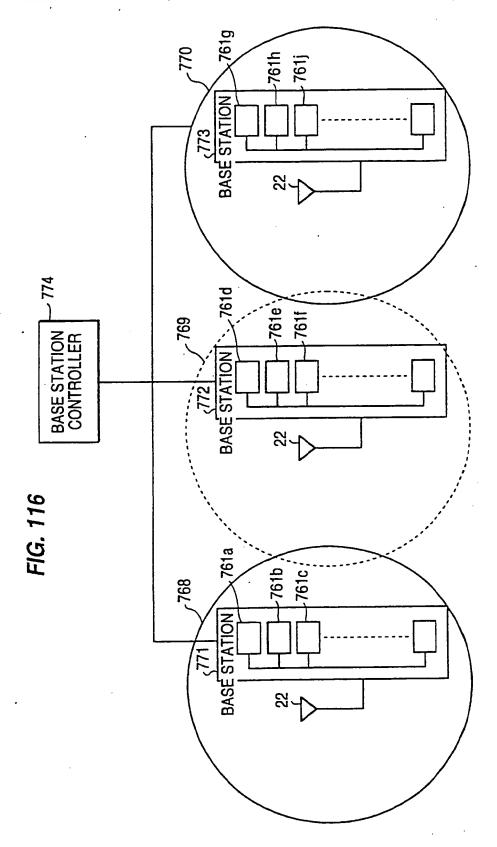
SUBCHANNEL-1 (SRQAM:D1 = 2bit)

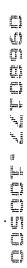


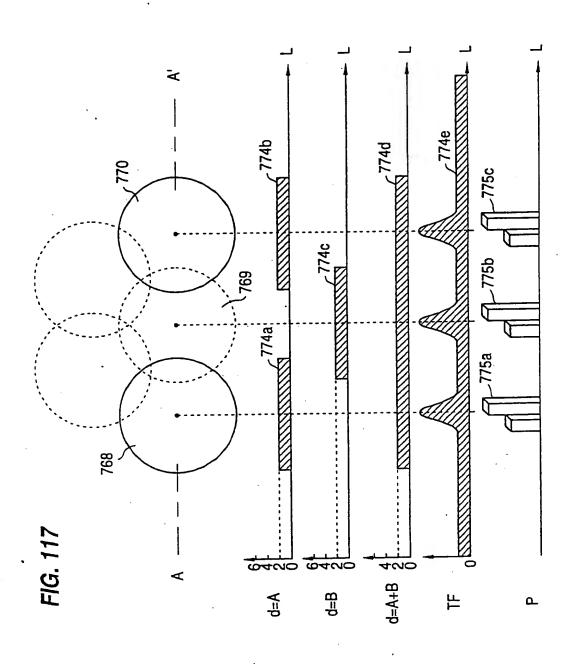


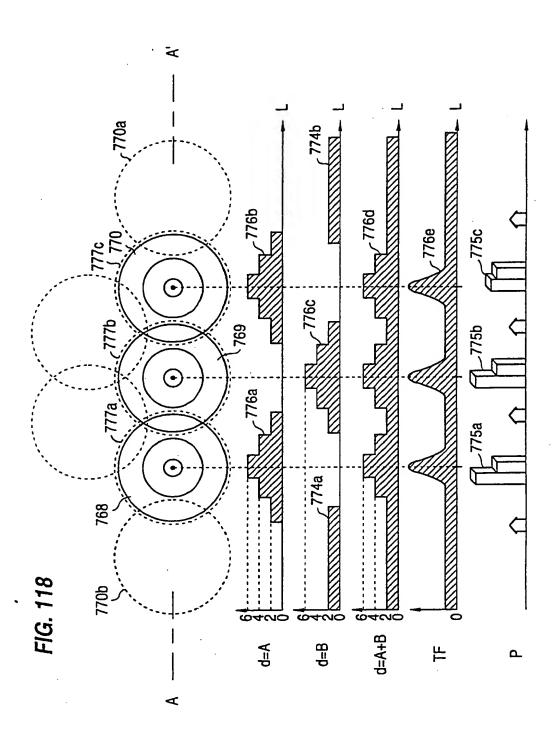


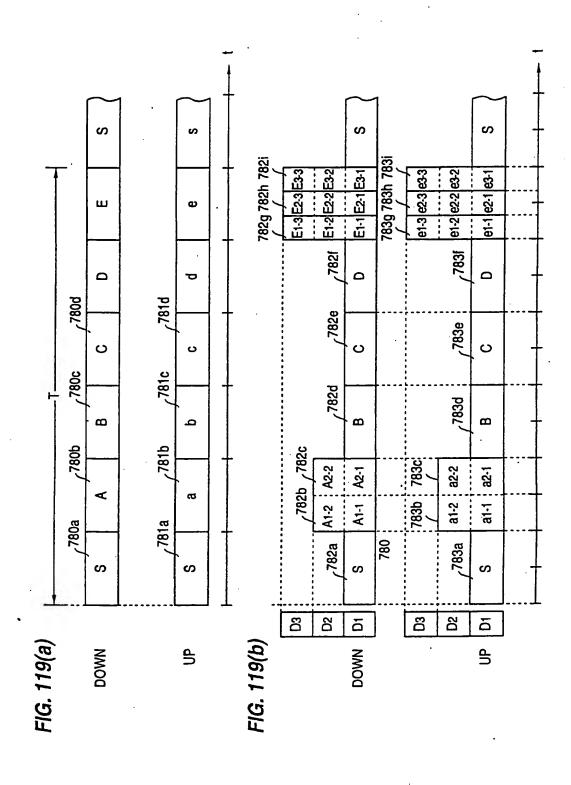


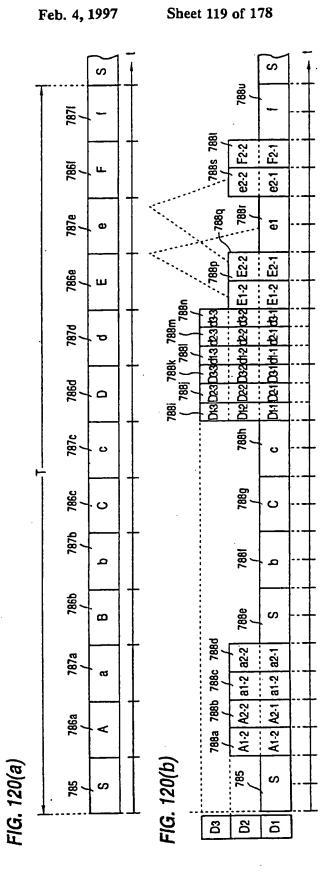




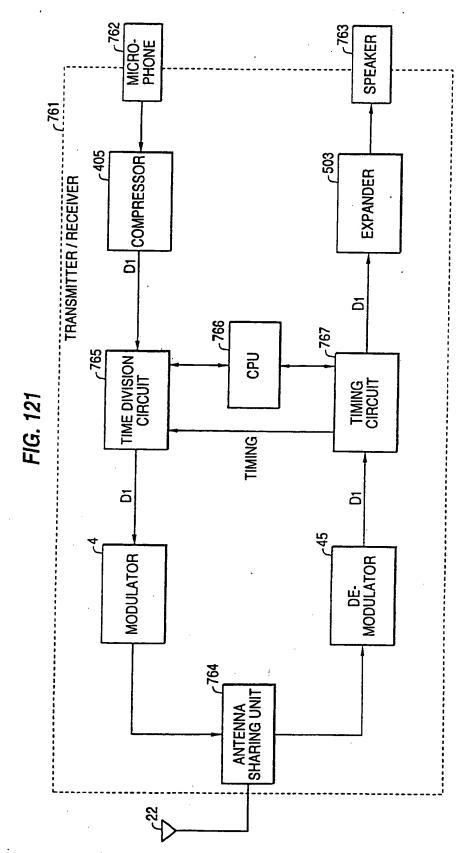


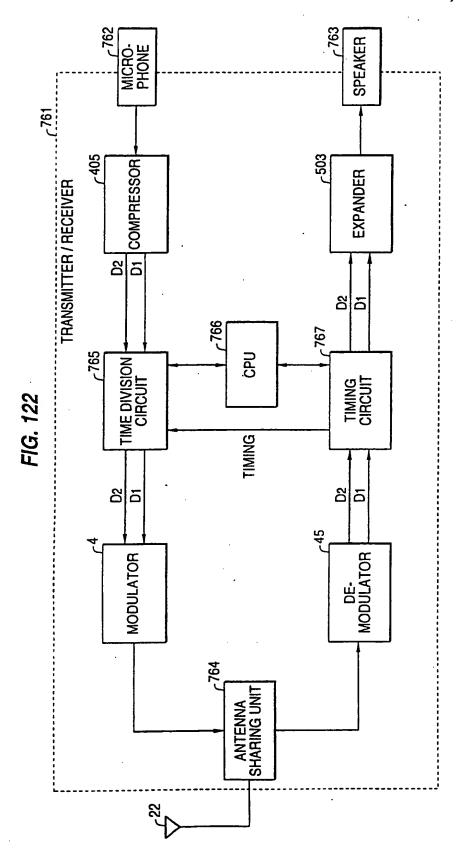




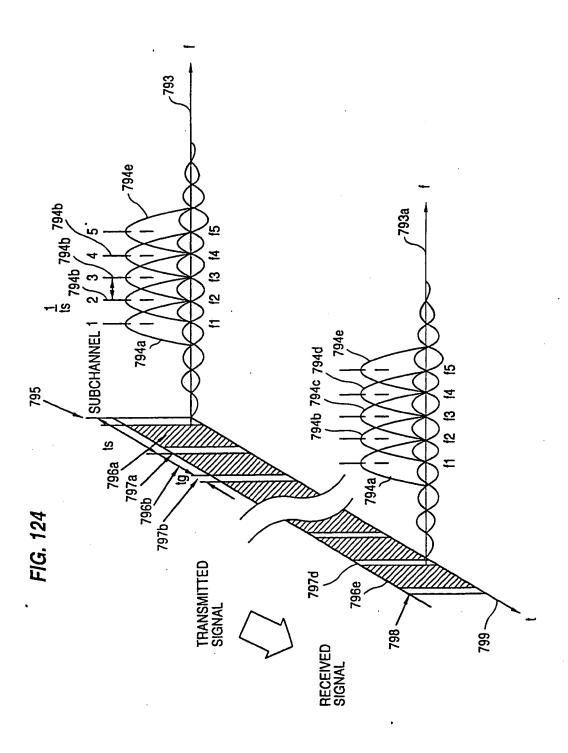


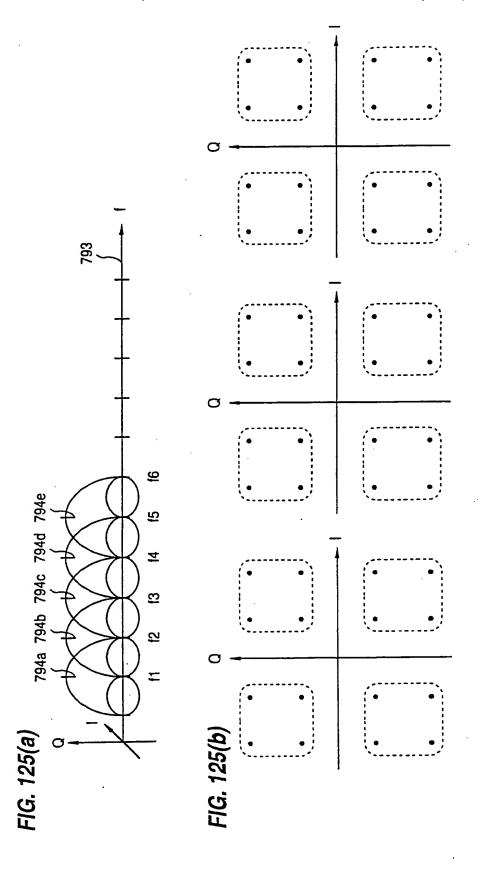
U.S. Patent Feb. 4, 1997 Sheet 120 of 178 5,600,672

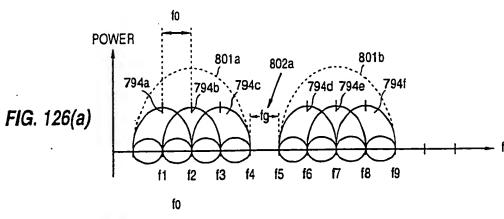


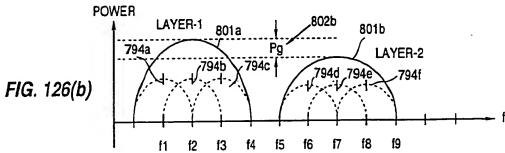


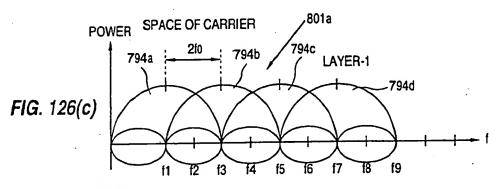
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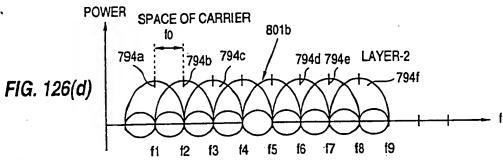












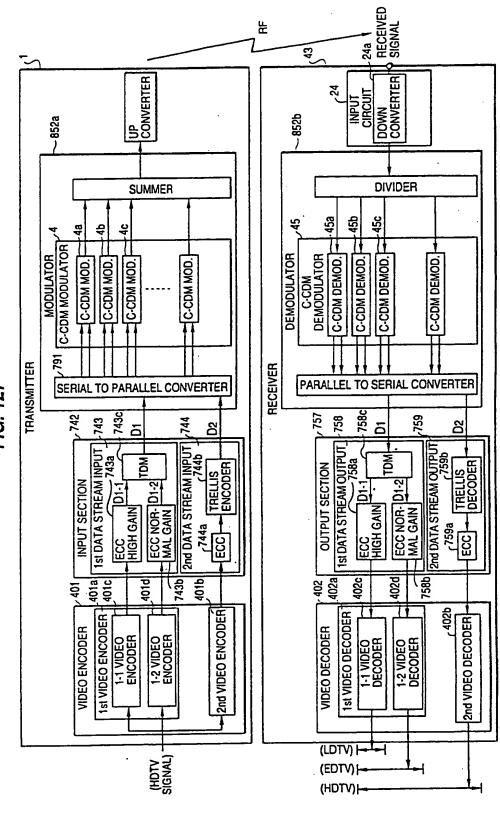


FIG. 127

41 m 34.

FIG. 128(a)

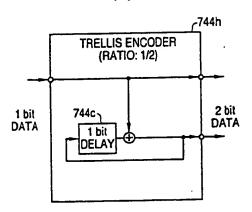


FIG. 128(d)

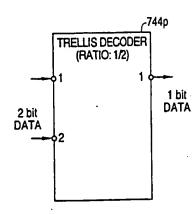


FIG. 128(b)

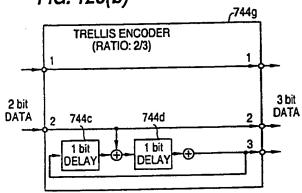


FIG. 128(e)

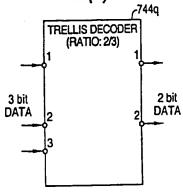


FIG. 128(c)

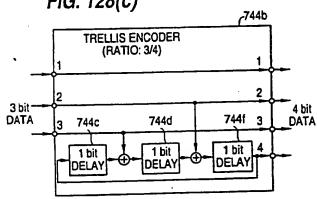
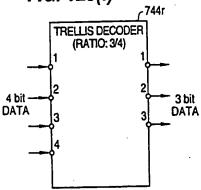
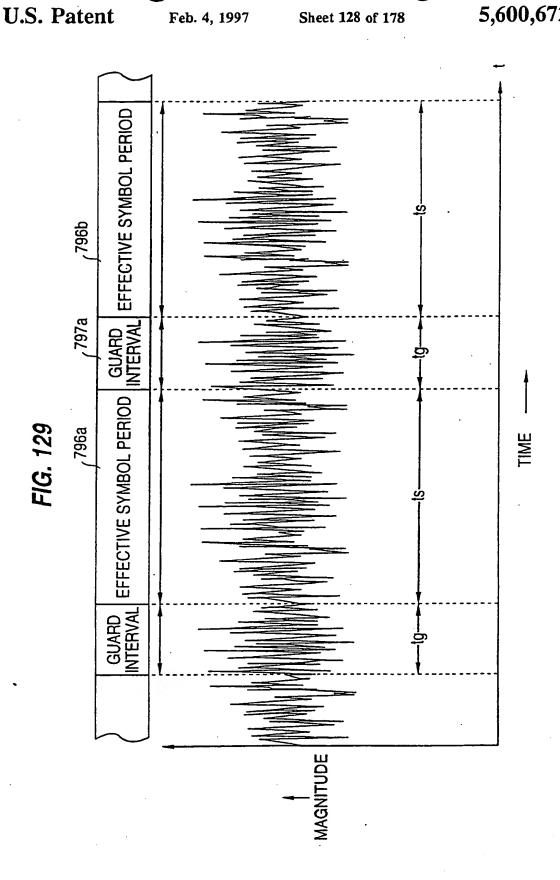
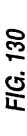
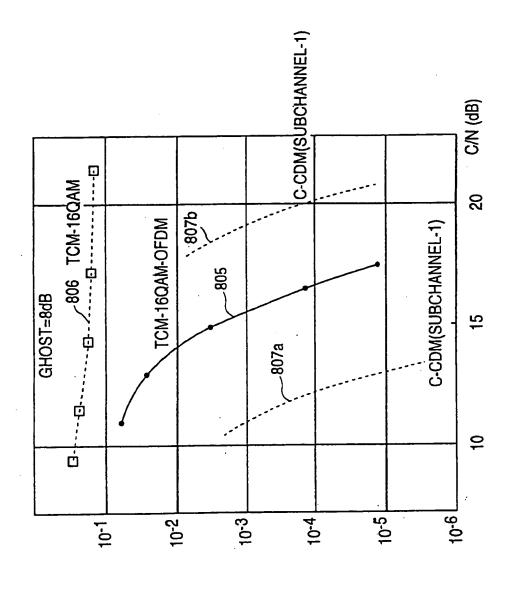


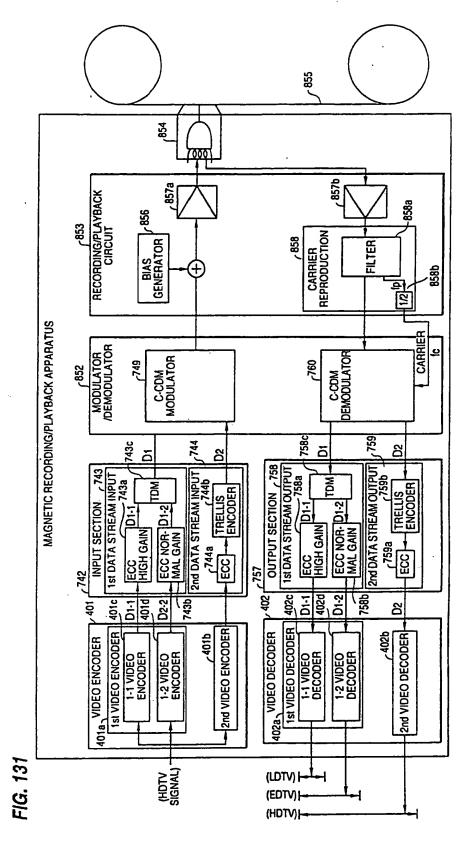
FIG. 128(f)



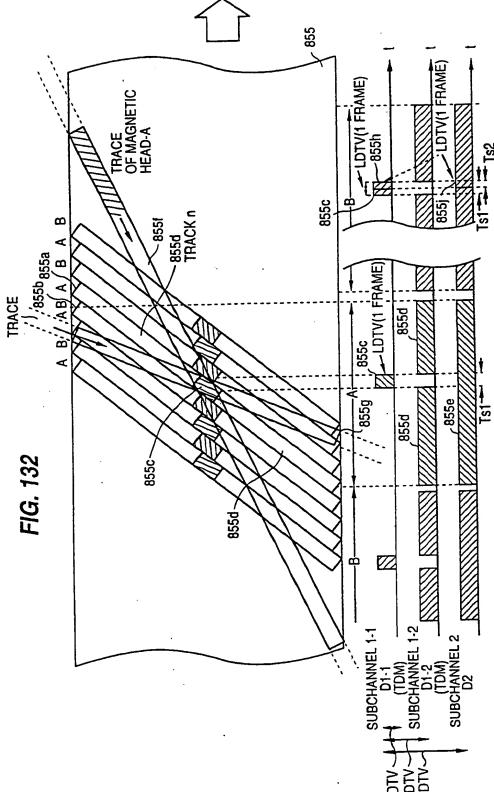








DYSCLY LIGHT



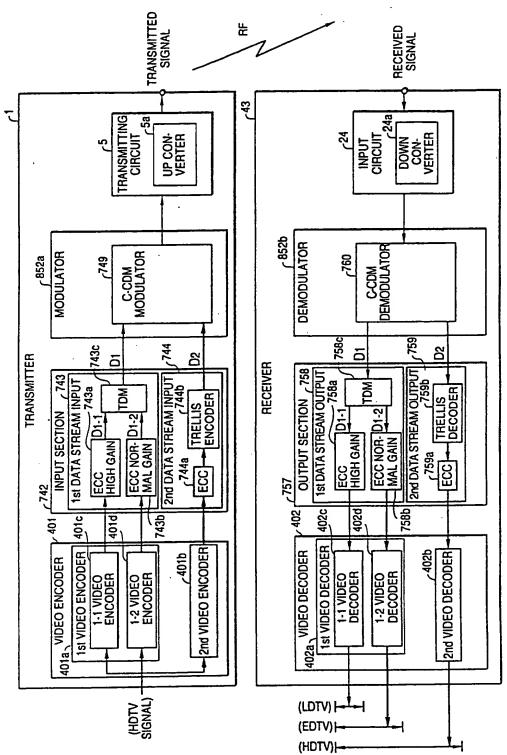
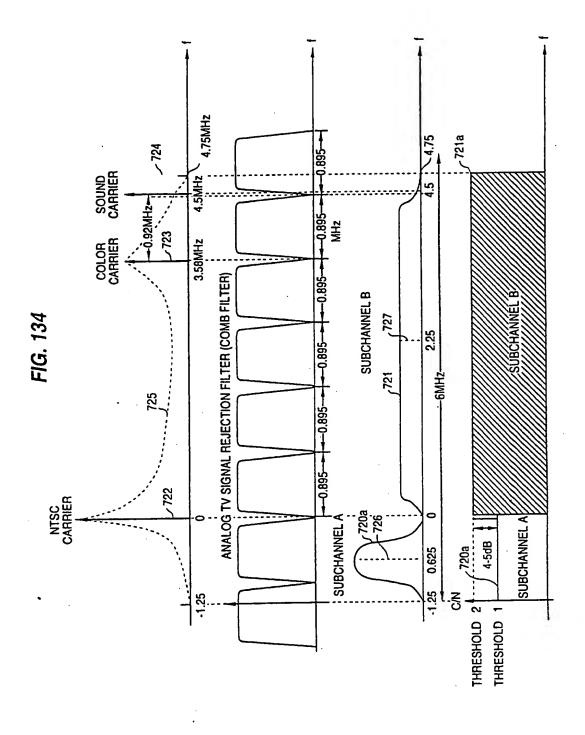
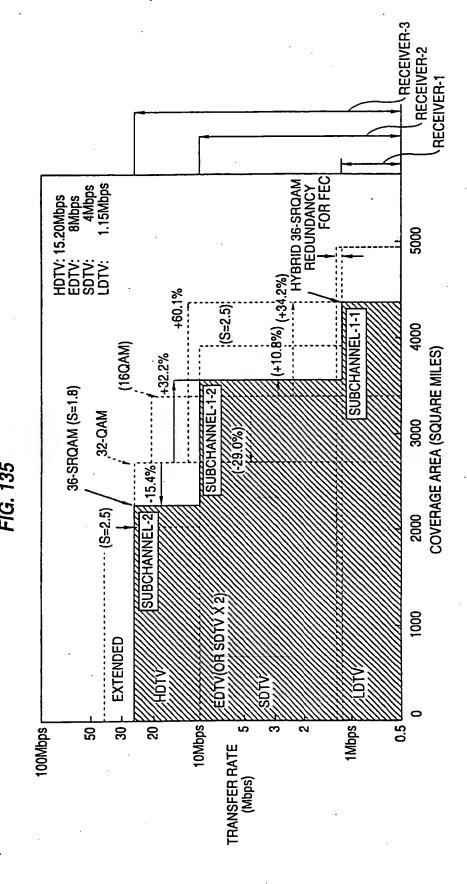
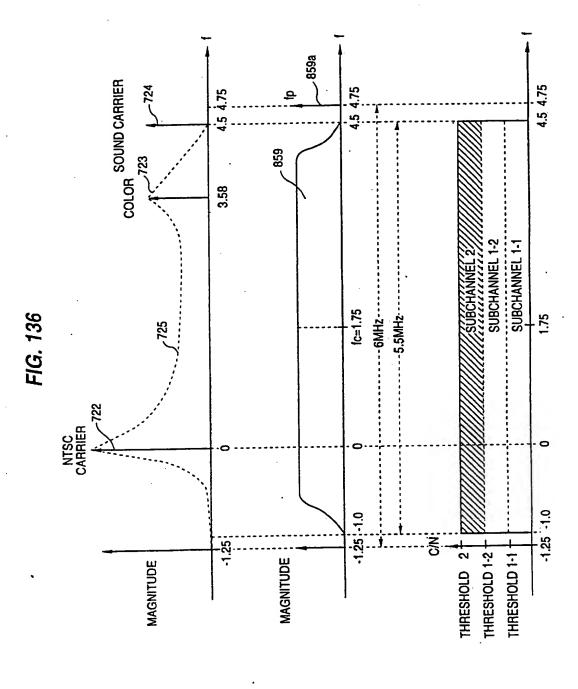


FIG. 133









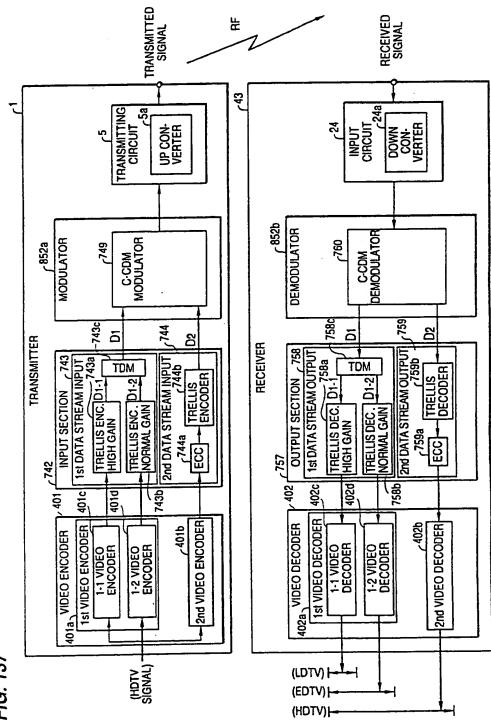
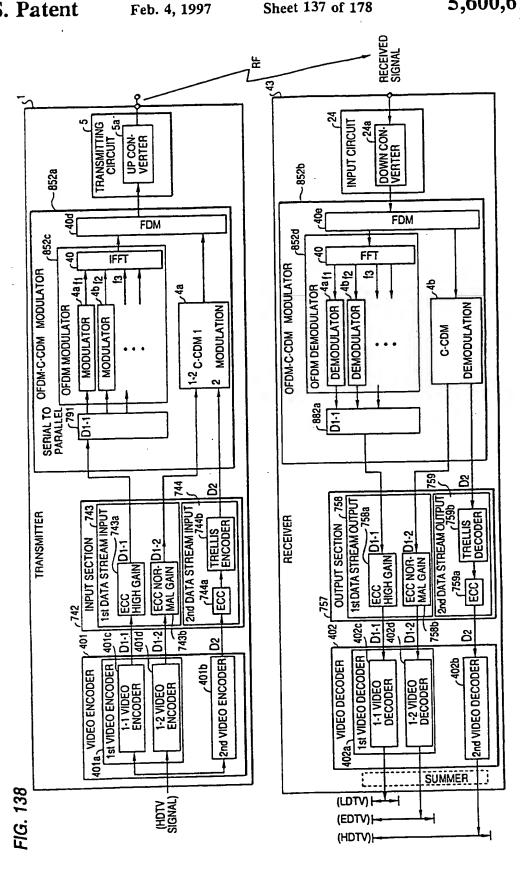
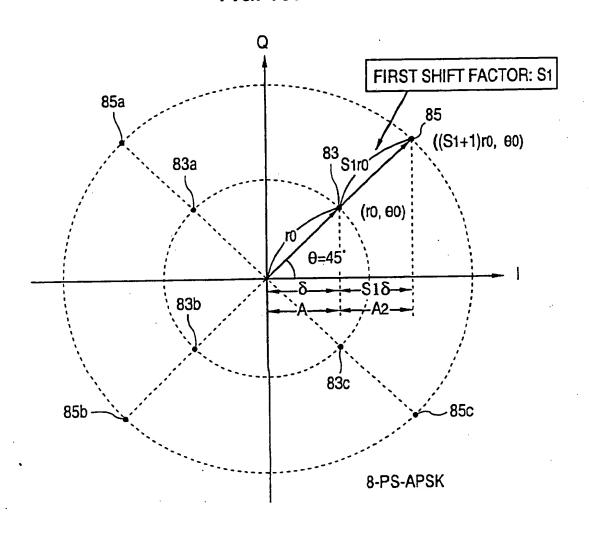


FIG. 137



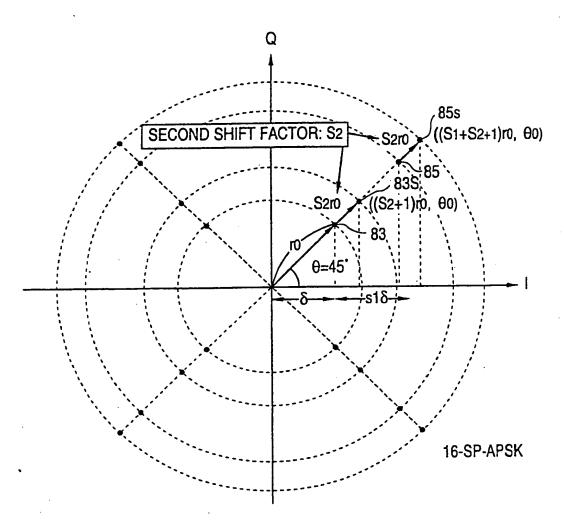
The second secon

FIG. 139



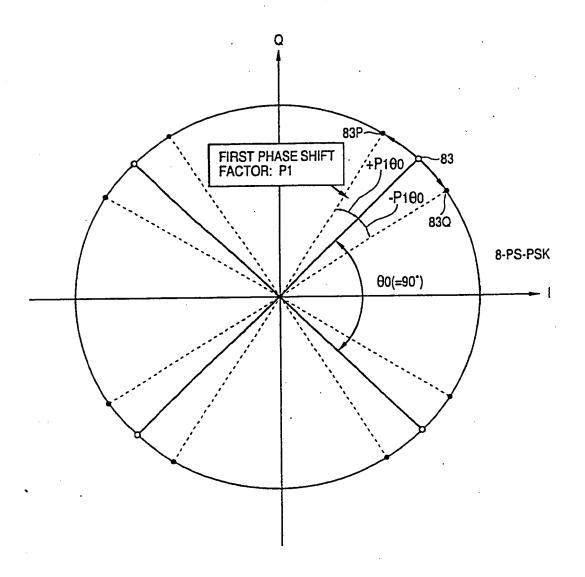
Dans Hann B" thank the think the first then the in the limit does not not not not

FIG. 140



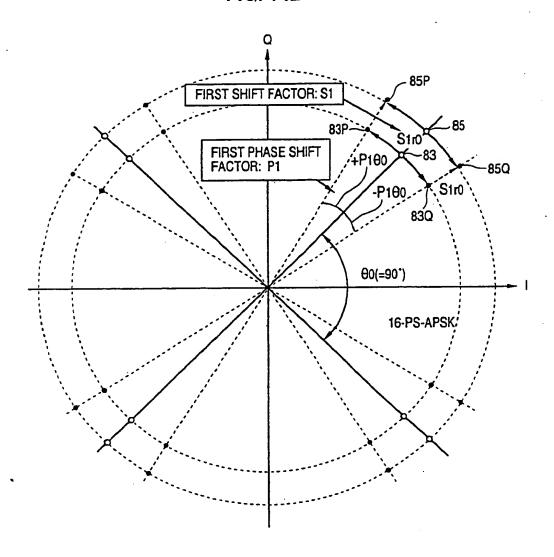
HILL LINE STONE THE THE

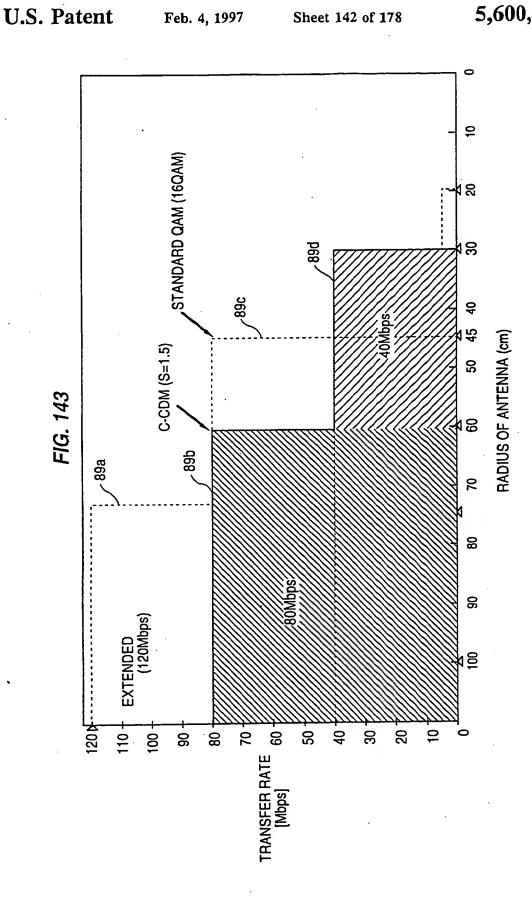
FIG. 141



OSSELLY . ISSUE

FIG. 142





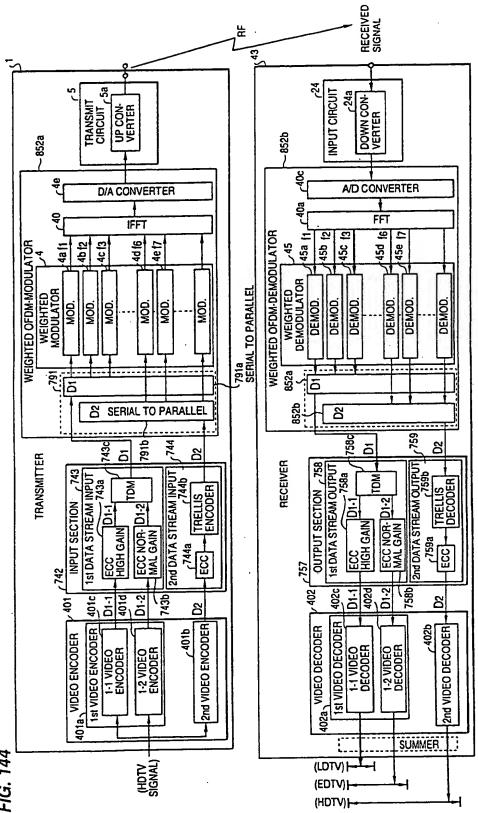


FIG. 145(a)

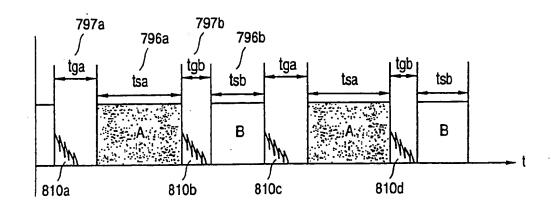
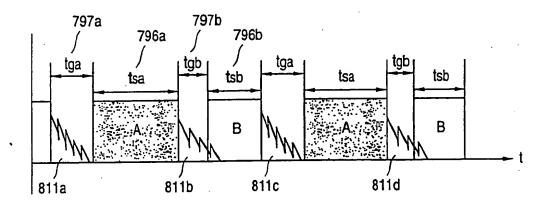
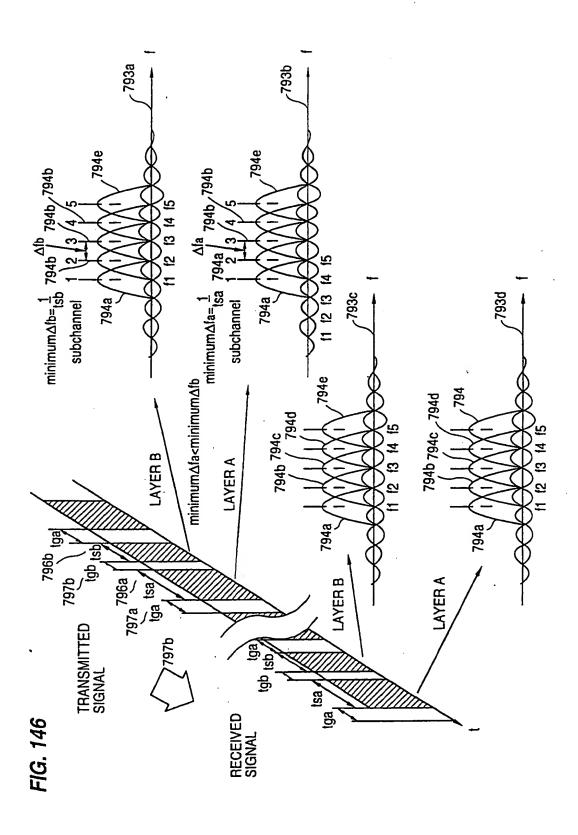
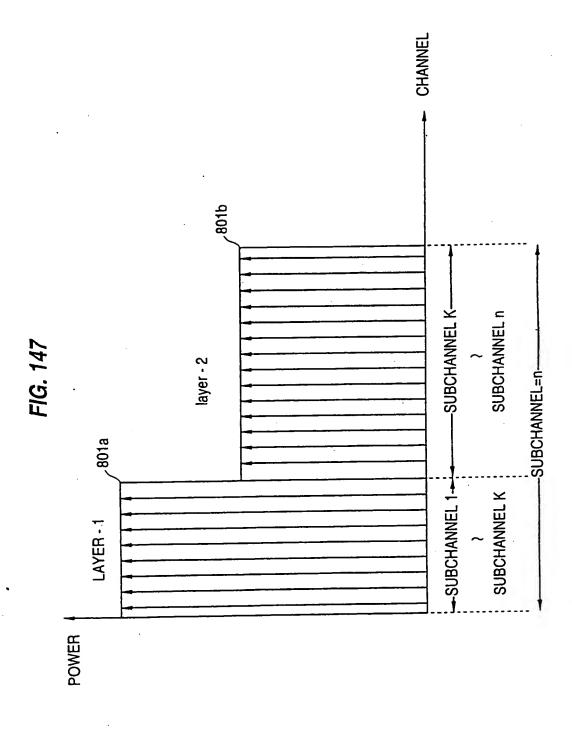


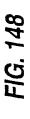
FIG. 145(b)

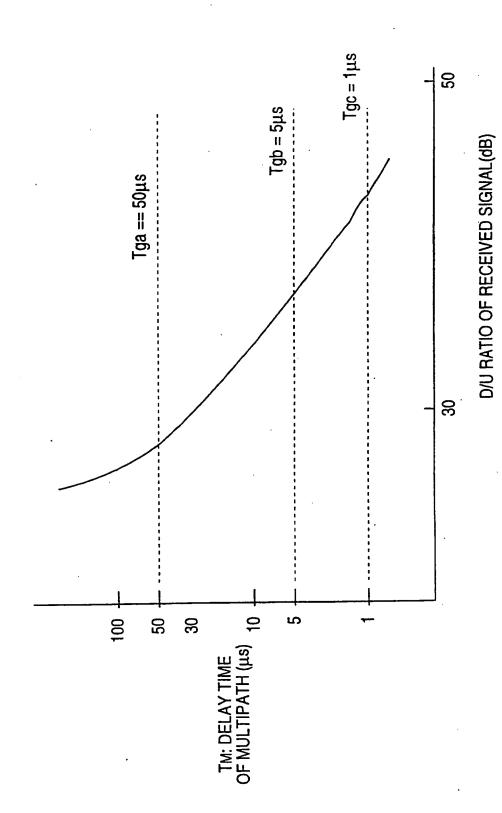


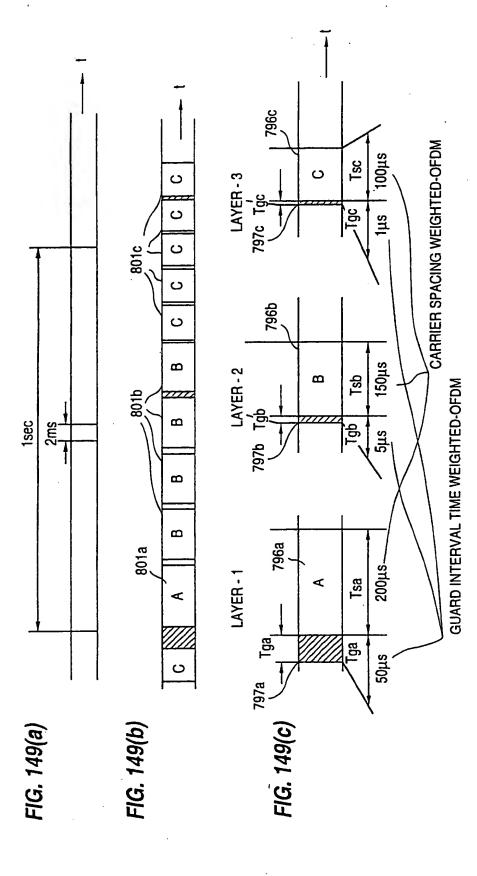


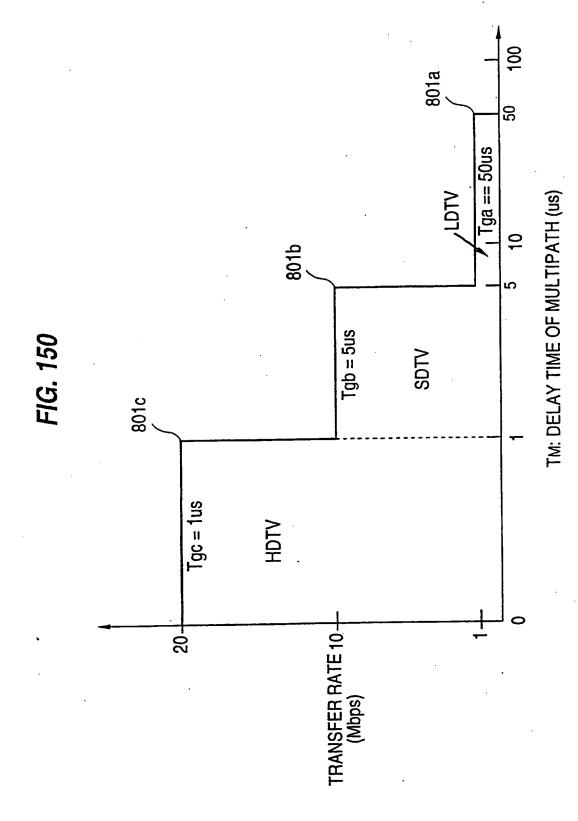
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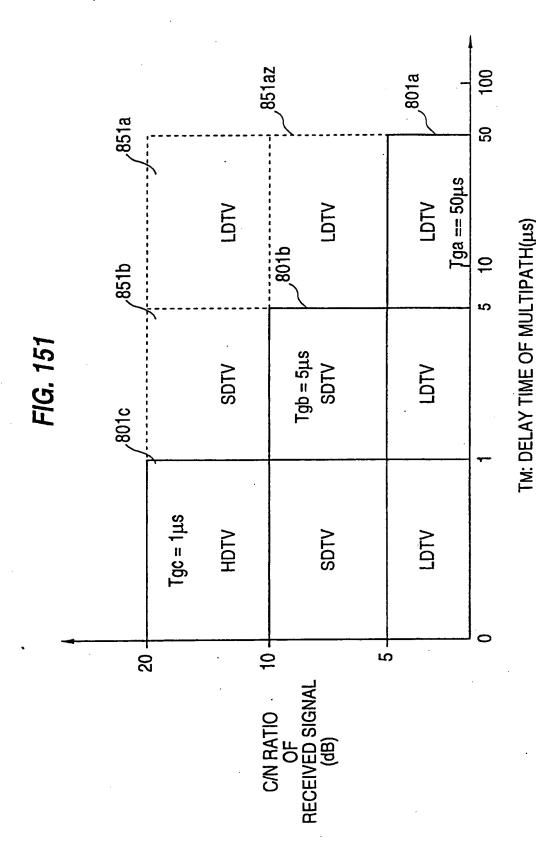


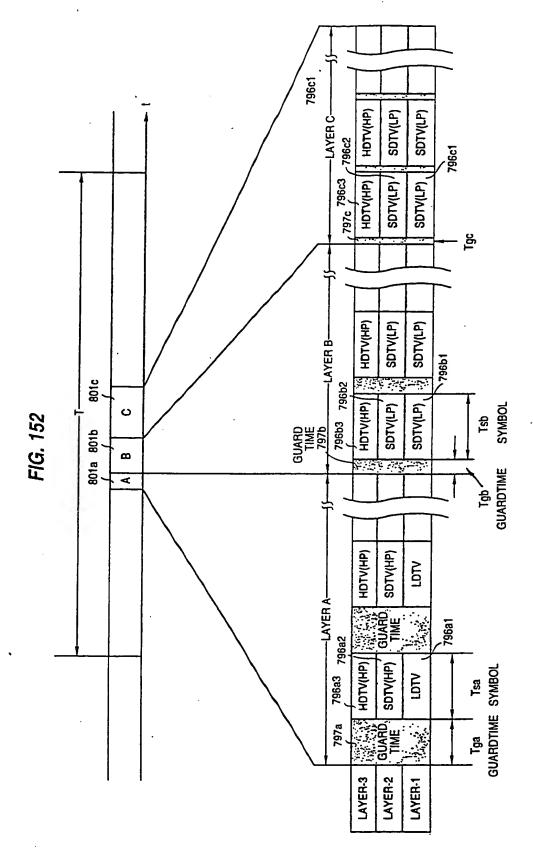


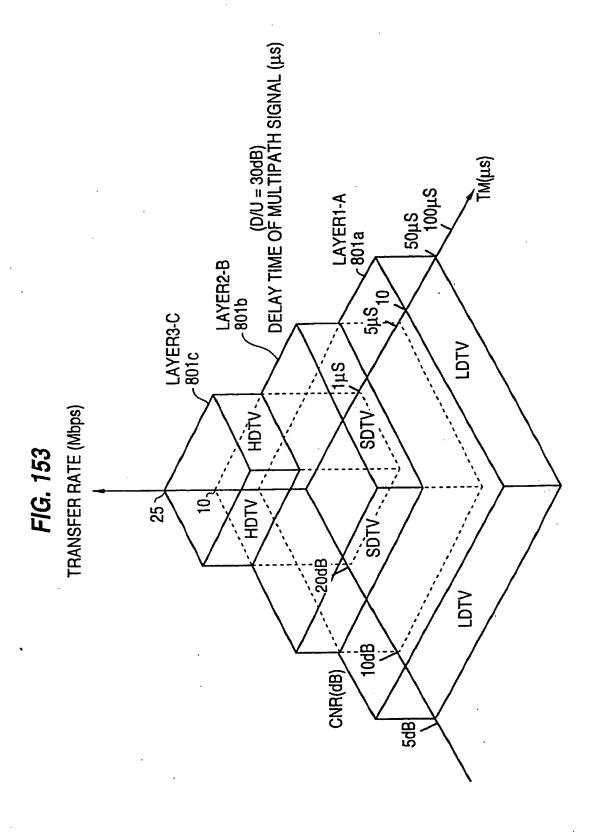


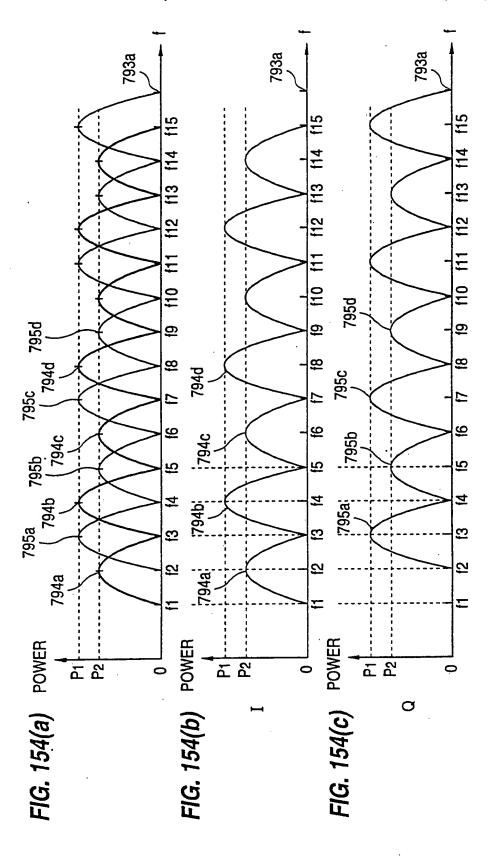


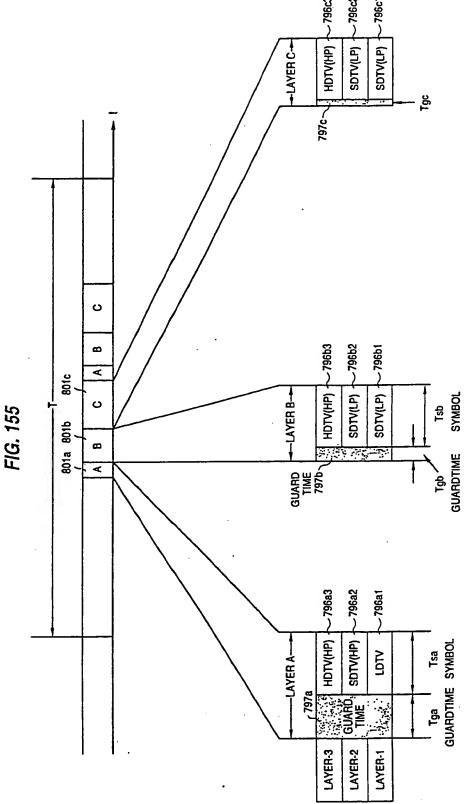


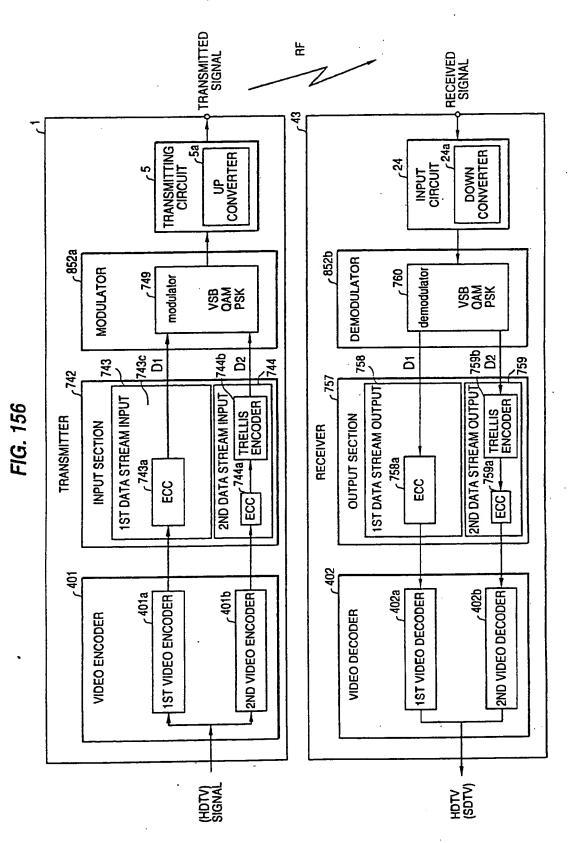


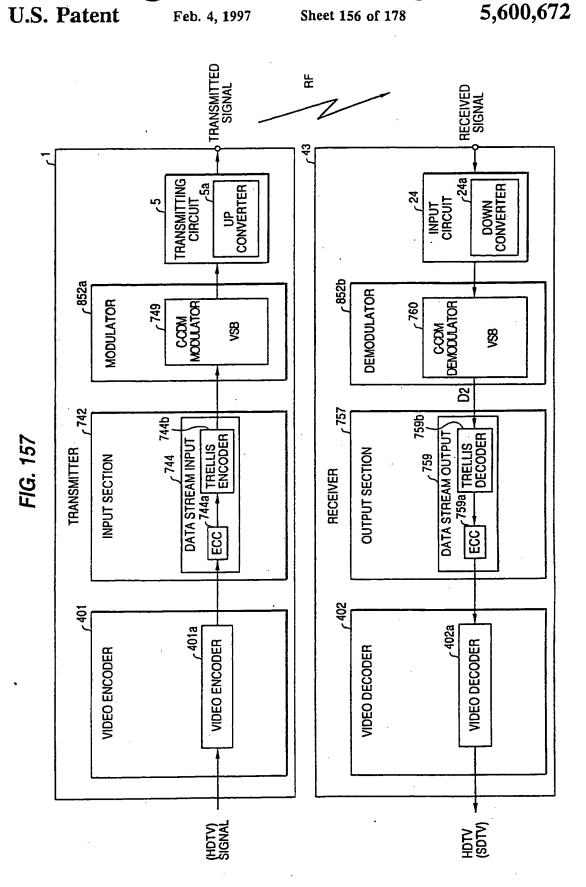


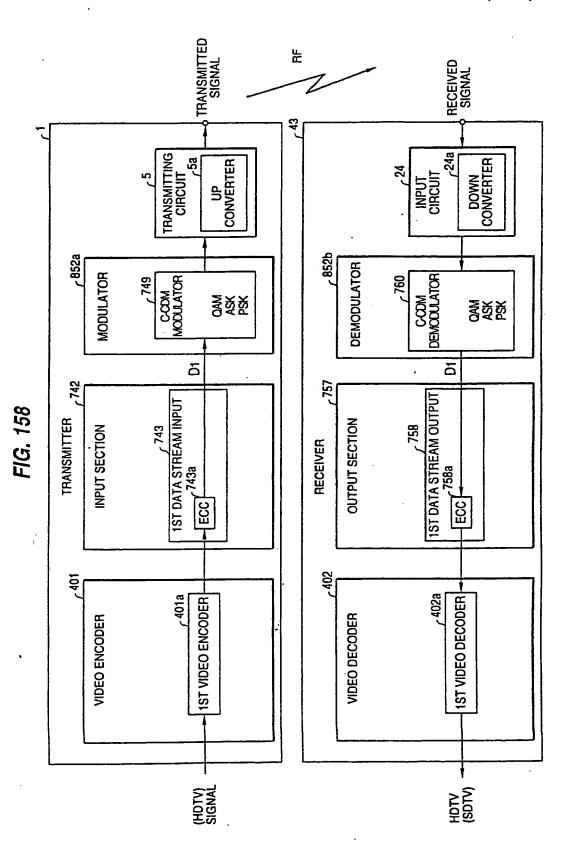


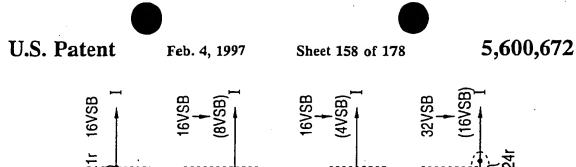


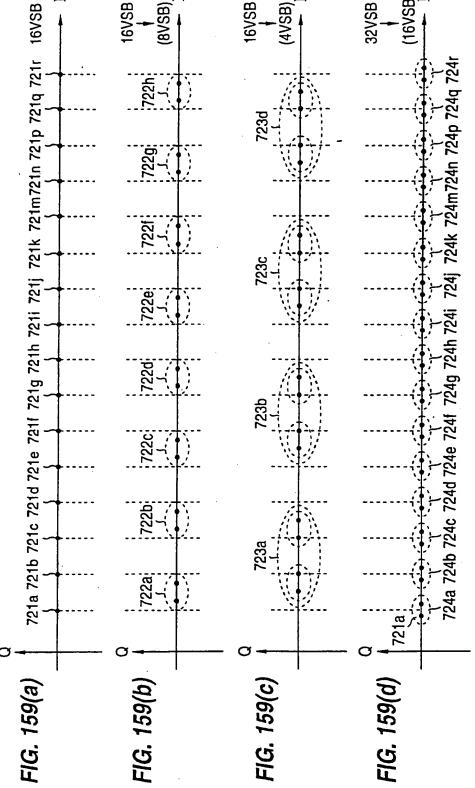


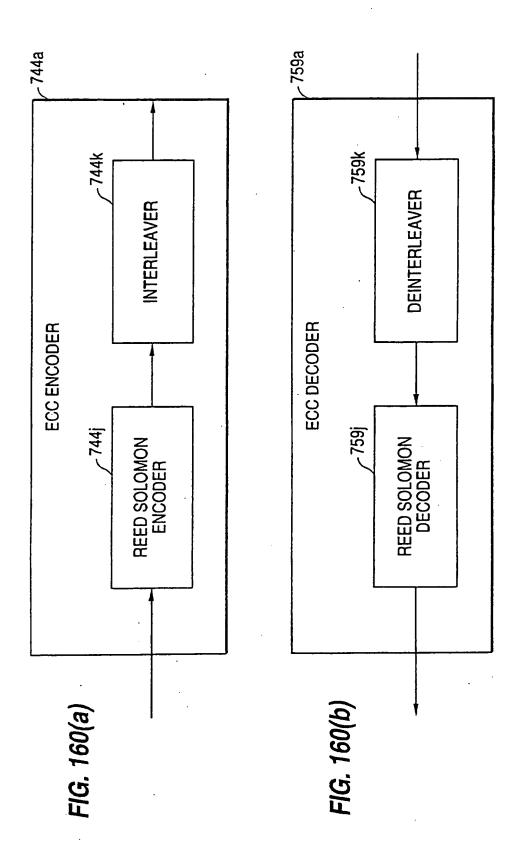


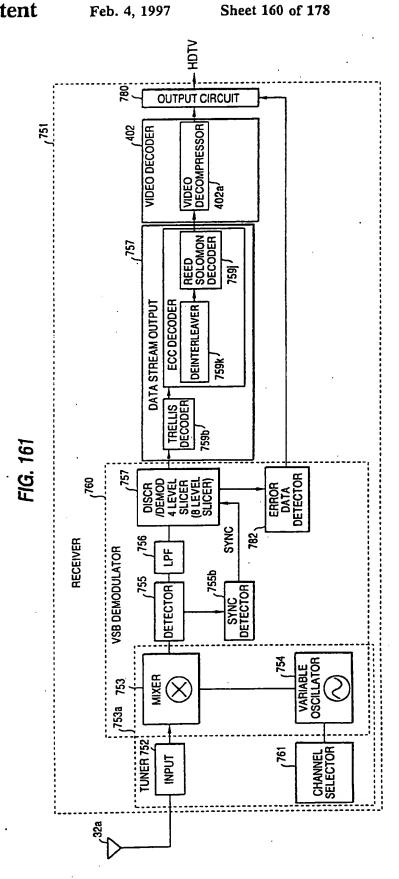












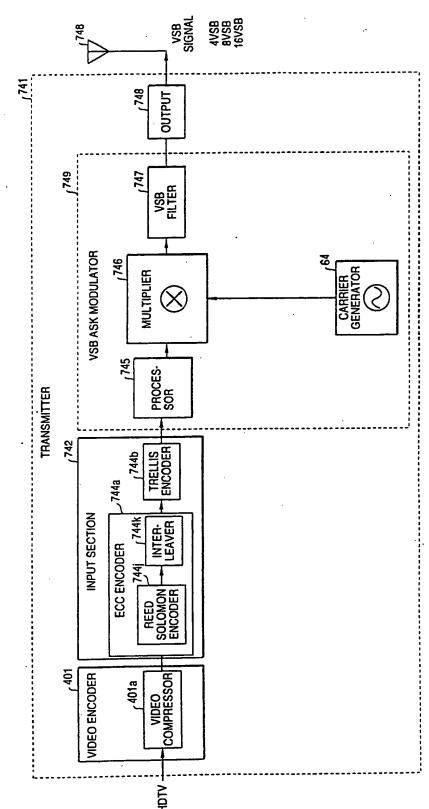


FIG. 16:

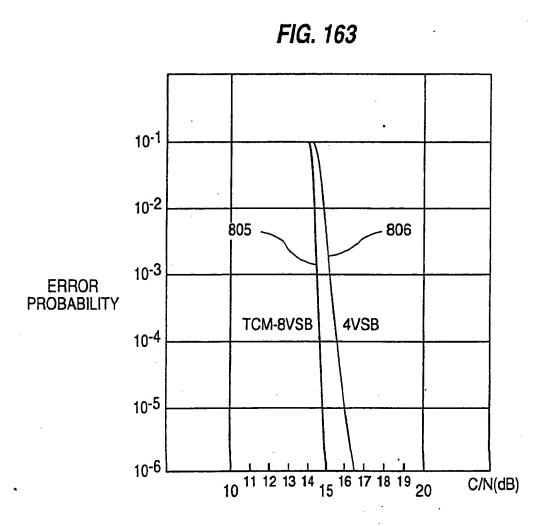


FIG. 164 10-1 4VSB TCM-8VSB 10-2 805 806 10-3 **ERROR PROBABILITY** 805a 805b 10-4 SUBCHANNEL-2 OF TCM-8VSB SUBCHANNEL-1 OF TCM-8VSB 10-5 10-6 10 11 12 13 14 15 16 17 18 19 20 C/N(dB)

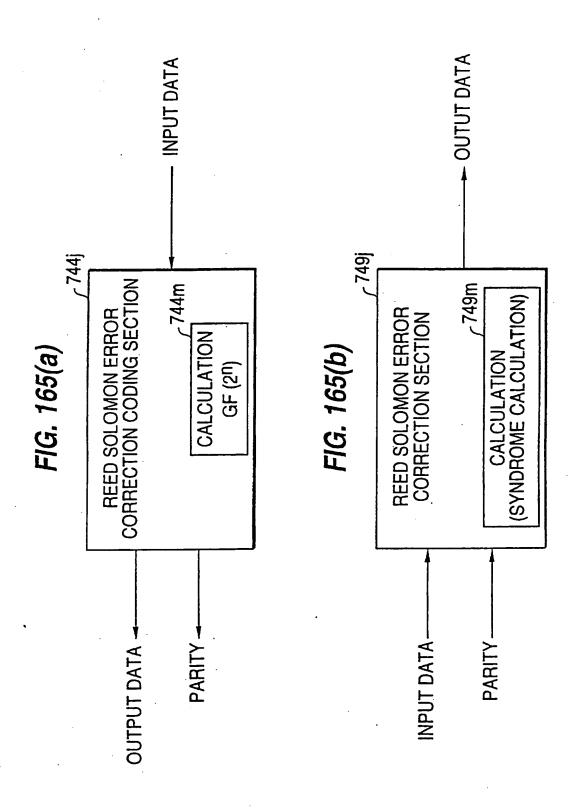
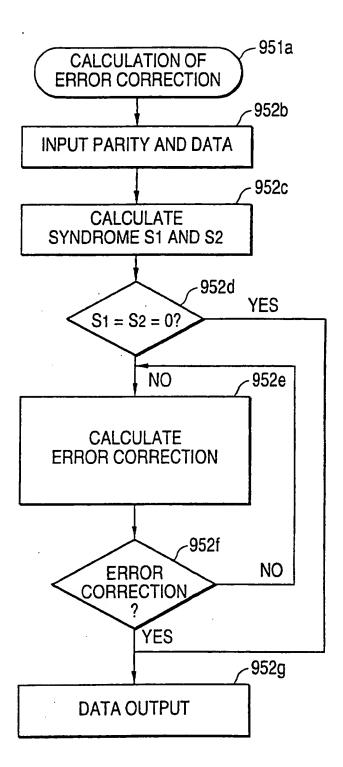
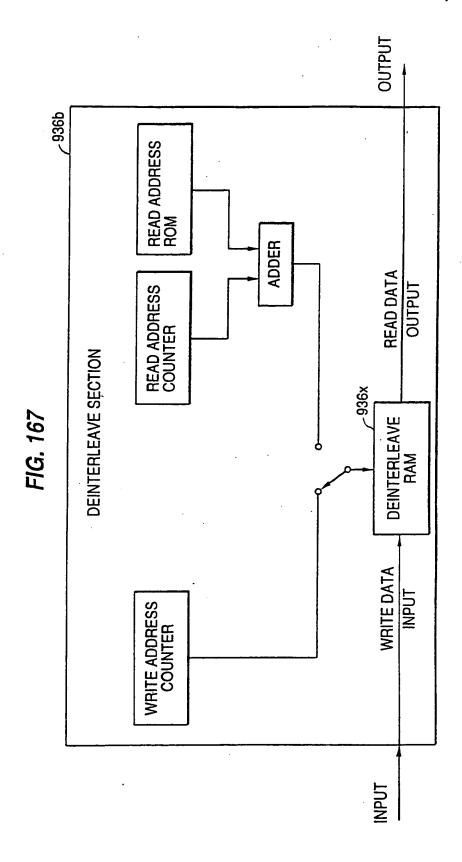
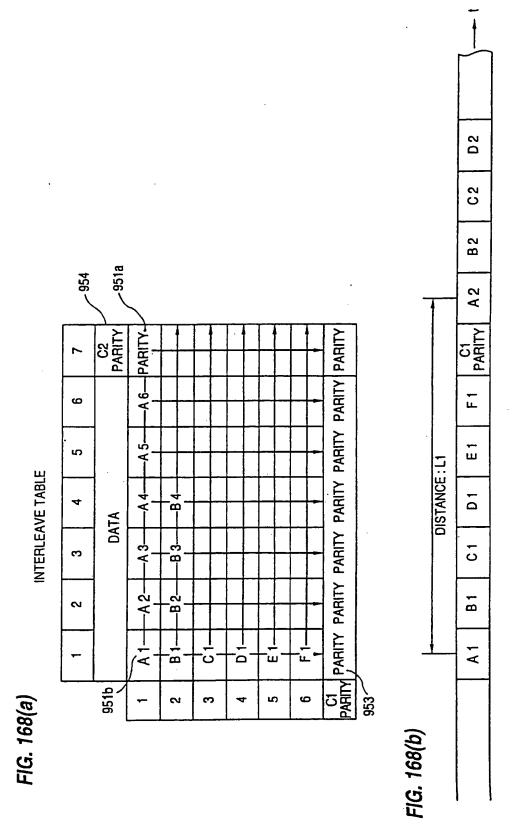


FIG. 166



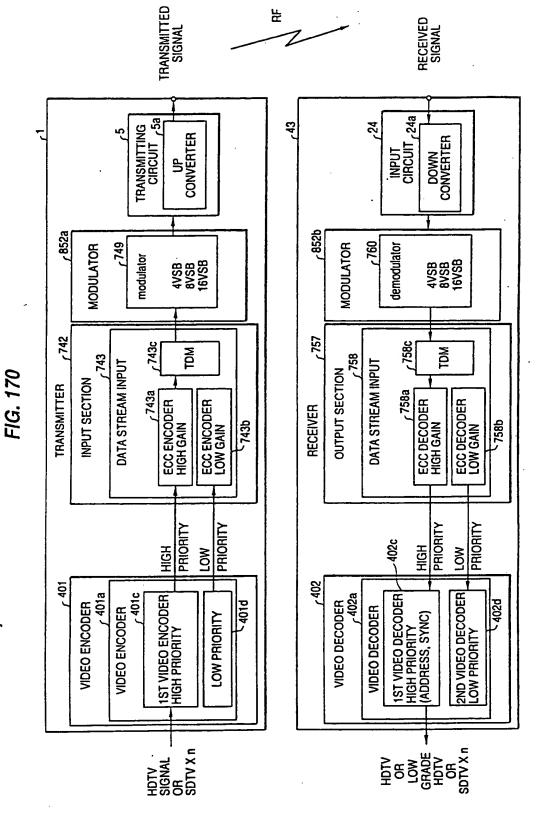






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16 - VSB REDUNDANCY: Ris =100% COMPARISON OF REDUNDANCY 8-VSB REDUNDANCY: Ris =50% R4 = 10%4 - VSB 10-TRANSFER RATE [Mbps] 20-ဇ္တ

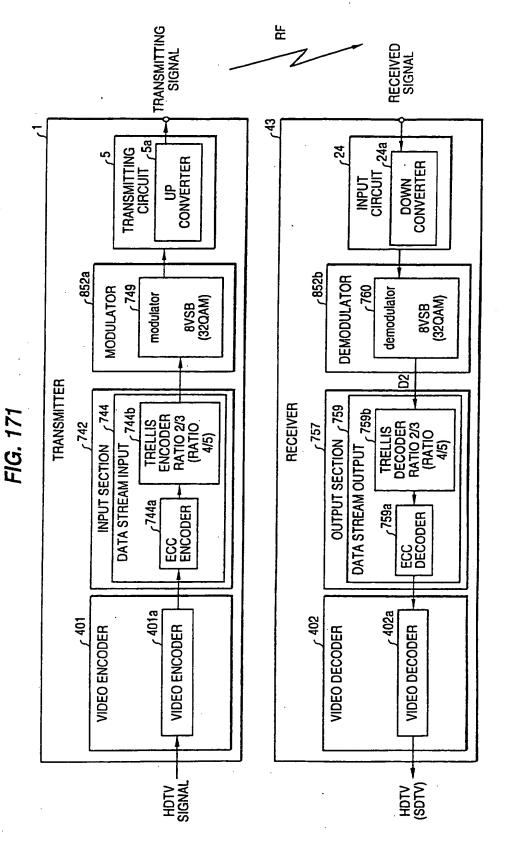


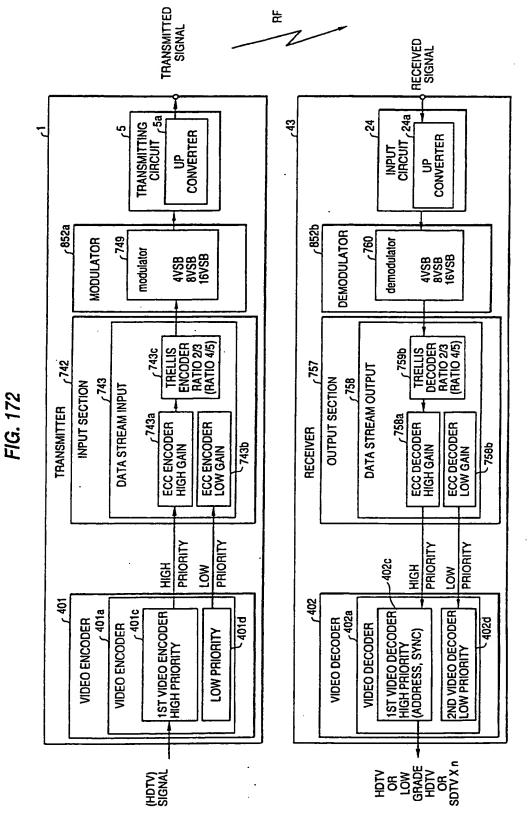
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5,600,672 U.S. Patent Feb. 4, 1997 Sheet 172 of 178 -855 854 857a RECORDING REPRO DUCING CIRCUIT 956 BIAS GENERATOR CARRIER REPRODUCING CIRCUIT 858b 122 858a~ C-CDM DEMODULATOR 4 - ASK 8 - ASK 16 - ASK DEMODULATOR C-CDM MODULATOR 4 - ASK 8 - ASK 16 - ASK MODULATOR 760

RECORDING AND REPRODUCING SYSTEM 20 20 ㅁ 5 OUTPUT SECTION , 758 INPUT SECTION 743 2nd DATA STREAM INPUT 1st DATA STREAM OUTPUT 2nd DATA STREAM OUTPUT 757 TRELLIS ~758a ဥ္ဌ ECC + ည္သ 1 1 1 2nd VIDEO ENCODER 2nd VIDEO DECODER 1st VIDEO ENCODER 401b 1st VIDEO DECODER 401a 402a 402b VIDEO ENCODER VIDEO DECODER FIG. 173

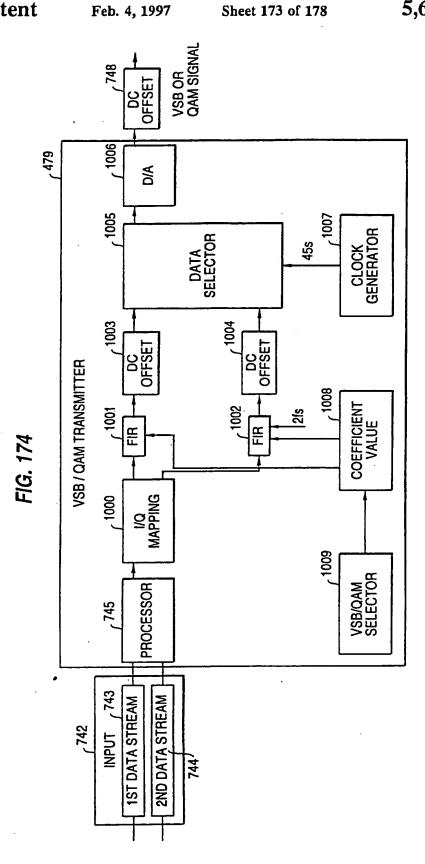
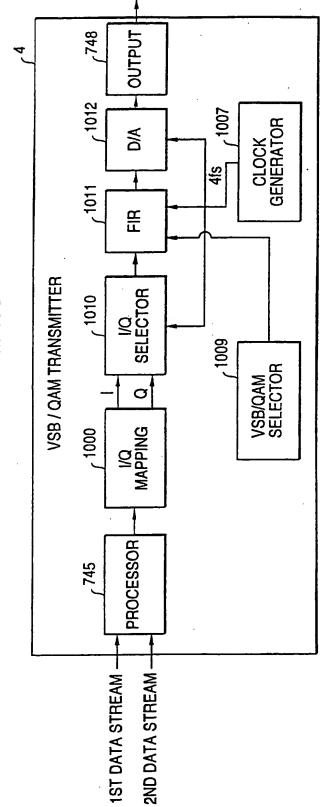
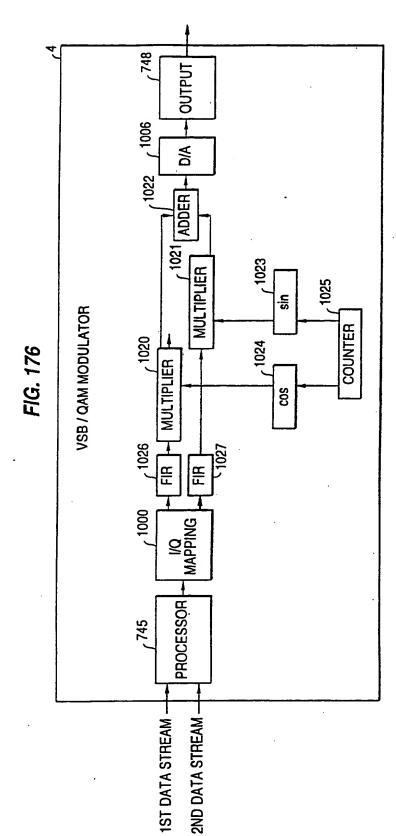
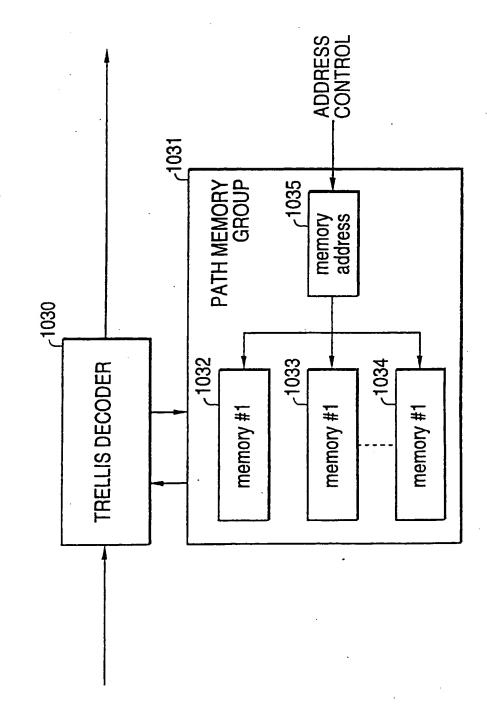


FIG. 175







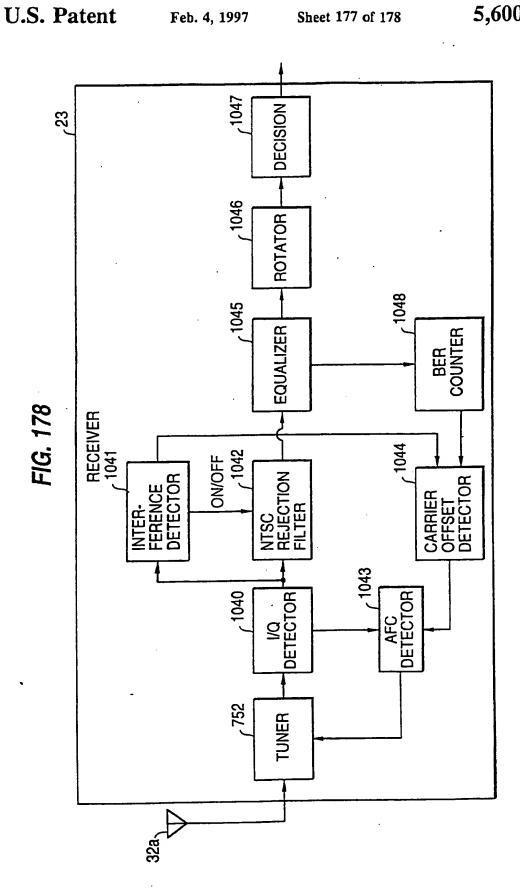




FIG. 179

